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WORK EXPERIENCE EDUCATION PROGRAM EFFECTIVENESS AND ORGANIZATION

by

RICHARD DOUGLAS GERMSHEID

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

FALL 1982

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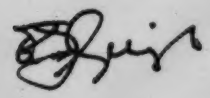

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ABSTRACT

The study was concerned with the linkages among organizations involved in a cooperative education program. The work of Lawrence and Lorsch (1969), Marrett (1971), Hasenfeld and English (1974), Hall (1977) and Andrews (1978) suggested that the manner in which organizations are linked together could provide useful information for interorganizational theory.

The major focus of the study was on the relationships that might exist between interorganizational linkages and perceived program outcomes in Work Experience Education in secondary schools in Alberta, Canada.

The conceptual framework employed in the study was derived from the work of Marrett (1971) on the specification of interorganizational dimensions. The extent of formalization, the intensity of the relationship, the degree of reciprocity and the degree of program integration were the specific linkage dimensions developed in this study. In order to provide a basis for assessing the impact of linkage dimensions on cooperative programs the Stake (1967) evaluation scheme which emphasized antecedents, transactions and outcomes was employed.

The respondents in the study were all directly involved in the Work Experience program: students registered in the program (N = 94), school coordinators (N = 24) and the students' immediate job supervisors (N = 73).

Analysis of variance revealed that positive relationships existed among most of the variables employed in the study. This

led to the generations of the following propositions which grew out of the study:

Proposition #1

If a cooperative program is characterized by high priorities for attaining program benefits, then that program is likely to be characterized by a higher degree of program benefit attainment.

Proposition #2

If affective and cognitive program benefits are accorded high priority in a cooperative program, it is most likely that the program will be characterized by a higher degree of affective benefit attainment.

Proposition #3

If affective and cognitive program benefits are accorded high priority and if a high degree of affective benefit attainment is perceived, the cooperative program is more likely to be characterized by a higher degree of program benefit attainment.

Proposition #4

If affective and cognitive program benefits are perceived to be attained in a cooperative program, it is most likely that the program will be characterized by a higher degree of official sanctions formalization.

Proposition #5

If affective and cognitive benefits are accorded high priority, if a high degree of affective and cognitive benefit attainment is perceived and if a high degree of official sanctions formalization is evident in a cooperative program, it is likely that a cooperative program will be characterized by a higher degree of coordination activity formalization.

Proposition #6

If a cooperative program is characterized by a high degree of resource exchange and a high degree of official sanctions formalization, it is likely that the program will be characterized by a higher frequency of interaction.

Proposition #7

If a cooperative program is characterized by a high degree of official sanctions formalization and a high degree of frequency of interaction, it is likely that the program will be characterized by a higher degree of resource exchange agreement.

Proposition #8

If a cooperative program is characterized by a high degree of cognitive benefit priority, by a high degree of cognitive benefit attainment, by a high degree of coordination activity formalization and a high degree of frequency of interaction, it is likely that

the program will be characterized by a higher degree of school contribution to program integration.

Proposition #9

If a cooperative program is characterized by a high degree of school contribution to program integration, it is likely that the program will be characterized by a higher degree of sponsor contribution to program integration.

The findings concerning the relationships identified between interorganizational linkages and program outcomes are tentative. In order to accept or reject these propositions on linkage dimensions in cooperative programs careful testing would be useful.

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CHAPTER 1

INTRODUCTION

Human service organizations[1] are becoming increasingly complex as the need for one organization to share resources offered by another intensifies. A result of sharing resources between organizations is the development of interorganizational dependencies. Some examples of such interorganizational dependencies are found in the Work Experience Education program.

In an attempt to develop conceptual frameworks, which could simplify the study of interorganizational relationships, increased attention has been given to interorganizational dependencies and resource exchanges. One useful way of studying interorganizational relationships, according to Marrett (1971), is to focus on the forms of linkage that join organizations to each other. This approach requires that variables, which link organizations, be specified and that they focus on the nature of the relations.

Though organizations may enter into interorganizational relations for the same purpose and engage in similar activities, some appear to be more effective in their endeavors than others.

---

[1] Hasenfeld and English (1974:1) define "human service organizations" as:

> . . . the set of organizations whose primary function is to define or alter the person's behavior, attitudes, or social status in order to maintain or enhance his well being.

PURPOSE OF THE STUDY

Secondary schools are complex organizations and as their need for resources intensifies they develop dependent relationships with outside agencies. Major sources of dependent relationships for secondary schools are business and industry which provide special resources and experiences that are not available within the boundaries of the school. Lack of resources results in the secondary school developing Work Experience Education programs in cooperation with outside agencies such as hotels, garages and chemical plants. The Work Experience Education programs are effective within the constraints of the dependent relationship and varying degrees of success have been observed among programs.

The purposes of this study were (1) to describe the interorganizational linkages between a secondary school and the sites at which Work Experience Education occurs, (2) to determine the perceived effectiveness of the Work Experience Education program, (3) to explore the relationships among the forms of linkages and (4) to investigate the association between the linkage dimensions joining a secondary school with a work site and program effectiveness.

BACKGROUND TO THE STUDY

The study of formal organizations and their internal patterns and structure has been subject to a considerable amount of attention by organizational theorists. The interrelationships

among human service organizations sharing scarce resources have been given little attention, and the interrelationships between human service organizations and profit seeking organizations have fared even less well. The problem was succinctly stated by Evan (1966:175): "The phenomena and problems of interorganizational relations are part of the general class of boundary-relations problems confronting all types of social systems, including formal organizations." Evan further argued that because many of the concepts and propositions of organizational theory are mainly concerned with intraorganizational structural attributes and processes interorganizational relations have not been attended to.

Hall (1972:322) has recognized the importance of using an interorganizational perspective for studying organizations. Hall states:

> Interorganizational relationships are affected by the wider environment of which they are a part. Political, cultural, ecological, demographic, technological, and economic conditions affect these relationships and, at any one point in time, are a constant consideration for the organization involved. Shifts in these factors will affect the relationships.

Clearly, organizations must be cognizant of those factors that can influence their relationships with other organizations. Investigations of interorganizational relationships will help to clarify this complex subject.

FOCUS OF THE STUDY

The major focus of this study was on the relationships that might exist between interorganizational relations and program

effectiveness in Work Experience Education in secondary schools in Alberta.

The reason for selecting the Work Experience Education program is as follows. The program is divided into two components: the school component in which the student is instructed in work-related behavior, and the field component in which the student is expected to implement those behaviors learned in school. In order to provide a sequential and complementary experience for the student considerable interaction and coordination must take place between the respective organizations.

PROBLEM STATEMENT

This is an exploratory study, hence, no hypotheses were generated. The major tasks of this examination were to:

1. Identify the perceived priorities anticipated of Work Experience courses.
2. Determine the perceived extent to which the anticipated benefits of Work Experience courses were attained.
3. Identify the types of linkages employed in Work Experience Education.
4. Determine the associations among program priorities, program benefit attainment and linkage dimensions.

JUSTIFICATION FOR THE STUDY

This study was justified on the following grounds: First, interorganizational relationships between human service

organizations and profit seeking organizations appeared to be a fruitful area for research and little had been done. Second, the study was needed because schools were required to become more involved with "non-educational" organizations in order to implement the Work Experience Education program. It was suspected that the various types of linkages adopted by the cooperating organizations were associated with variances in perceived effectiveness. Therefore, it was considered possible that program effectiveness in some locations could be enhanced by altering the linkages among cooperating organizations; thus, an investigation and analysis of linkages were required to improve effectiveness.

Writers exemplified by Aiken and Hage (1968), Marrett (1971), and Hall (1977) hold that the study of interorganizational relationships is both useful and valid.

Hasenfeld and English (1974:540) contend:

> It is useful to study interorganizational relationships in order to understand the conditions that lead to emergence of relationships between organizations . . . and to become aware of the forms of linkages which effectively join organizations to each other.

Many human service organizations have had to deal with interorganizational problems, examples of these are in the penal system and teacher and medical education. The secondary school is a major form of human service organization that has recently become involved in extensive interorganizational relationships. More than ever before, secondary schools have had to consider external agencies because of a number of externally imposed constraints. Work Experience Education is

an example of educational programs within secondary schools which require students to gain practical experience from other autonomous organizations such as are found in business and industry. The secondary school and external organizations must be joined in some way since both agencies, the secondary school and the business or industry, provide essential components of the Work Experience Education curriculum. With respect to this specific interorganizational relationship, no research study has been identified to this time.

Marrett (1971) provided a useful analytical approach for examining interorganizational relationships which emphasize the forms of linkages between organizations. The degree of formalization, the intensity of the relationships, the extent of human and physical resource exchange, and procedural standardization were identified as major linkage dimensions. Marrett (1971) claimed that data collected with respect to the form and intensity of the interorganizational relationships would be useful with regard to the effects of these linkages on program outcomes.

Hasenfeld and English (1974) and Hall (1977) also argued the importance of information for organizations with regard to the forms of linkages that join organizations to each other. Information on linkage dimensions will allow an organization to anticipate the consequences of the relationship, thereby enabling it to adjust its organizational structure to improve that relationship.

A study and analysis of selected Work Experience Education programs could form a basis for action, analysis, and direction with regard to the impact of interorganizational relationships on human service organizations, particularly secondary schools.

DEFINITION OF TERMS

For the purpose of clarity the following definitions have been adopted for terms used in this study.

1. Work Experience is used to describe an approved off-campus task undertaken by students for high school credit. Work study and other types of cooperative education were not considered in this study.

2. Linkage dimensions refer to relational properties or characteristics of the connection between the school and the sponsor in a Work Experience program.

3. Formalization is the degree to which the interorganizational relationship between the school and the sponsor is given official recognition by the parties involved.

4. Intensity refers to (a) the amount of material and human resource commitment, and (b) the frequency of interaction that the school and the sponsor have to make to maintain a viable Work Experience program.

5. Reciprocity is the degree of resource exchange or sharing between school and sponsor.

6. Integration refers to the degree to which there is harmony of effort directed toward making the Work Experience program unified.

7. Benefit refers to the anticipated student learning in Work Experience Education as stated by Alberta Education (1976).

8. Sponsor refers to the organization that provides an off-campus work site.

9. School is a secondary school that provides an approved Work Experience program and offers courses at the Grades 10, 11 and 12 levels.

10. Supervisor is the person who supervises off-campus work of students on behalf of a sponsor.

11. Coordinator is a staff member of a school who is designated to administer the Work Experience program in a school and who is responsible for off-campus supervision of students.

12. Student is a high school pupil who has been accepted for temporary employment under a Work Experience Education agreement.

ASSUMPTIONS

For the purpose of this study the following assumptions were made:

1. The perceptions of respondents regarding integration, formalization, intensity, reciprocity, importance and attainment of benefits are accurately reported on the instruments used in this study.

2. The sample of Work Experience programs used in the study is representative of the various programs which currently exist in the province.

3. The measures of program effectiveness used in this study are appropriate indicators for assessing the perceived effectiveness of the Work Experience program.

DELIMITATIONS

This study was delimited in the following ways:

1. The study was delimited to approved Work Experience programs in public and separate secondary schools in Alberta and their sponsoring organizations: human service and/or profit seeking organizations.

2. The respondents were delimited to students, coordinators and supervisors involved in the Work Experience program.

3. Interorganizational analysis was delimited to the relational dimensions of formalization, intensity, reciprocity and program integration.

LIMITATIONS

While the assumptions and delimitations previously stated represent limitations to the study, two other limitations can be stated:

1. Future changes in personnel and/or linkage dimensions could render the data collected at one point in time invalid for another time period.
2. The rate of instrument return may affect generalizing the data to the population.

ORGANIZATION OF THE THESIS

This chapter has provided (1) an introduction to the problem, (2) the purpose of the study, (3) the background to the study, (4) the focus of the study, (5) the justification for the study, (6) the problem statement, (7) the definitions of terms, (8) the assumptions, (9) the delimitations and (10) the limitations.

Chapter 2 provides a review of literature and research related to interorganizational relationships and the conceptual framework for this study. Chapter 3 deals with the methods employed in data collection and analysis. The development and refinement of the instruments used for data collection are also reported in this chapter. Chapter 4 describes the responses of students, teachers, and supervisors to general questions. Chapter 5 provides a profile of responses to student learning activities. Chapter 6 provides a description and analysis of data emerging from the School-Sponsor Relations questionnaire. Chapter 7 deals with the relationships as found in this study

among linkages, perceived priorities, and perceived attainment of Work Experience Benefits. Chapter 8 summarizes the findings of the study, presents the conclusions, a number of recommendations, and several implications derived from this study.

CHAPTER 2

REVIEW OF RELATED LITERATURE ON INTERORGANIZATIONAL DEPENDENCIES, PROGRAM EFFECTIVENESS AND CONCEPTUAL FRAMEWORK FOR THE STUDY

It was pointed out in Chapter 1 that little research-based knowledge exists which deals with the problems posed by this particular research topic. However, a considerable body of research does exist which deals with the open systems perspective for examining organizations, and a number of writers have explored the theoretical issues concerning interorganizational relationships. This study involved an examination of the Work Experience Education program and considers both secondary schools and business and industry which participated in the programs in the Province of Alberta. The nature of the topic strongly indicated a need to provide a review of the literature and a conceptual framework that dealt with the following subjects.

1. Review the open systems concept as a theoretical base for studying interorganizational relationships.

2. Outline the reasons for the development of interorganizational dependencies.

3. Elaborate on the idea of linkage dimensions as important in analyzing interorganizational issues.

4. Explore the issues involved in evaluating the effectiveness of a program.

5. Provide a conceptual framework that considers linkage dimensions and program effectiveness.

Although there were a number of theoretical approaches which could have been utilized to describe and compare cooperative programs, the open system perspective seemed to be the most appropriate as observed by Schein (1970:106):

> . . . organization theorists have begun to build more complex models which attempt to take into account relationships between systems and their environments. These new systems models do not have the neatness or completeness of the classical concepts of organization, but they are a closer approximation of what the researcher finds when he actually studies organizations.

A brief description of the open systems perspective and how it provides the basic framework for this study follows.

Organization and the Open Systems Theory

Early organizational theorists held that organizations could be understood as rationally coordinated parts whose activities were directed toward an explicit purpose through a division of labor and an authority hierarchy.

Hall (1977), Schein (1970), Katz and Kahn (1966), and others held that such a simplistic view of organizations failed to account for the complex nature of organizations, and that such a view was an inadequate basis from which theorists could examine organizations. The traditional approach failed to account for the complexity of organizations; both internal and external forces generate pressures and constraints which were not considered by early theorists. The organization was not the sum of its parts. An approach that acknowledged the high degree of interaction of the internal parts of an organization and acknowledged the impact of external forces on that organization had to be developed which

recognized those powerful influences on the organization.

Schein (1970:104-116) described an open systems approach which appeared to recognize the organization as a dynamic system in constant interaction with the environment through import, conversion and export of energy. This conceptual approach recognized that the energy return from the output provides the necessary reactivation for the organization to continue. Katz and Kahn (1966:16-17) stated:

> Social organizations are flagrantly open systems in that the input of energies and the conversion of output into further energic input consist of transactions between the organization and its environment.

Clearly, a major facet of the open systems idea was the effect of the external environment upon the organization. An important part of that environment was other organizations and the impact of these organizations on the focal organization was documented by Litwak and Hylton (1962), Evan (1966), Aiken and Hage (1968), and Terreberry (1968). Hasenfeld and English (1974: 540-544) observed an increase in interorganizational interdependence in human service organizations as they became more complex.

Schein (1970:104-105) went to the heart of the issue when he stated:

> Perhaps the most important argument for a systems conception of organization is that the environment within which organizations exist is becoming increasingly unstable. With the rapid growth of technology, the expansion of economic markets, and rapid social and political change, come constant pressures for organizations to change, adapt, and grow to meet the challenges of the environment.

Organizations in an attempt to maintain dynamic equilibrium, according to the open systems concept, engage in relevant interactions with their environment. The interactions permit organizations to import more energy than is expended, thus decreasing entropy and avoiding static equilibrium. The open system, therefore, will fulfill its needs through input from other systems and will fulfill the needs of other systems through its output.

The clear specification of organizational boundaries due to the multitude of links between the organization and its environment is difficult, for those boundaries are not static impermeable limits, but only relatively identifiable. Though organizations may be described in terms of size, shape, functional, or structural characteristics, they may be better described as relatively amorphous entities engaged in input, throughput, and output activities.

Hall (1977:56) adding another dimension to the systems model, suggests that organizations be regarded as "natural-systems." He suggests that specific organizational goal realization is but one of several needs to which the organization must address itself in order to react to environmental pressures. Survival of the organization may lead to neglect of goal seeking behavior and responses to the environment may be relatively unplanned and adaptive rather than guided by organizational goals and rationality.

The open systems approach is much broader in scope than earlier perspectives and more exacting when used for research.

and as Hall (1977:59) stated:

> Few researchers have the tools or the ability to take into account all of the various components that must be included in even a relatively simple open-system model.

Even so, organizations do accomplish many of their tasks: inputs are modified and outputs are produced, goals are identified and decisions are made on a relatively predictable and stable basis.

Hall (1977:60) concluded:

> In essence, organizations attempt to be rational, controlling their internal operations and environment to the greatest extent possible, but never achieving a totally closed rational system. How well the organization achieves rationality depends upon the strength of the internal and external pressures and the organization's capability of control.

The Systems Approach Employed in This Study

This study was concerned with an examination of the linkages existing between a secondary school and a job site in a Work Experience Education program. Since Work Experience Education programs are only developed when there is a degree of interdependence between the organizations involved, it seemed appropriate to consider these organizations as being exposed to influences generated by other organizations over which they have limited control. The selection of the literature and the method of analyzing the Work Experience Education program was made from an open systems perspective which is cognizant of the importance of the organizations to each other when engaged in a cooperative program. In order to determine whether secondary

schools in the province developed similar linkage dimensions in a Work Experience Education program, it seemed necessary to select institutions which had similar external environments and were exposed to similar influences. The rationale for this selection was found in the open systems approach to organizational analysis.

Organizations, according to open systems theorists, are more than a mere mechanistic collection of individuals. Therefore, in order to gather data on how members of an educational institution and a business enterprise establish program linkages a perceptual approach appeared to be appropriate. This would account, to a degree, for the dynamic aspect of the organizations involved.

INTERORGANIZATIONAL DEPENDENCIES: AN OVERVIEW

The previous section of this chapter outlined the importance of the environment to organizations. This section deals with a review of the literature directed toward (1) the complex nature of interorganizational relationships, (2) the reasons why organizations develop interorganizational relationships, (3) the ways in which interorganizational relationships can be examined and (4) a review of current thought and research on interorganizational relationships. This chapter ends with a model for examining linkage dimensions between organizations involved in a Work Experience Education program.

Interorganizational Relationships and Dependencies

The study of formal organizations and their intra-organizational patterns and structure has been given considerable attention by researchers and theorists while few studies exist that deal with interorganizational relationships among human service organizations sharing scarce resources. Still fewer deal with the problems involved in interorganizational relationships between human service organizations and profit seeking organizations.

However, the environmental forces and conditions important to interorganizational relationships have been given considerable attention. Terreberry (1968:606), using an open systems viewpoint, developed an integrated network for the study of organizational environments. Her basic assumptions were:

1. As organizational complexity increases the organizational environments are more turbulent.
2. Complex organizations are becoming less autonomous.
3. Other organizations are increasingly important components of an organization's environment.

Terreberry (1968:590) formulated two hypotheses arising from these assumptions:

> That organizational change is increasingly externally induced and that organizational adaptability is a function of ability to learn and perform according to changes in the environment.

The environment in organizational network relationships has identifiable dimensions. Benson (1975:247) found these dimensions to include:

1. resource concentration/dispersion,
2. power concentration/dispersion,
3. network autonomy/dependence,
4. environmental dominance patterns,
5. resource abundance/scarcity, and
6. environmental/network control mechanisms.

As the need for scarce resources and control over those resources varies so too will organizational autonomy vary.

Guetzkow (1966:31), defined organizational autonomy as "the degree to which a group functions independently of other groups and occupies an independent position in society." Litwak and Hylton (1962), Thompson (1967), and Hall (1977) also addressed the concept of organizational autonomy, and agreement exists among them that organizations attempt to attain positions of relative autonomy. Thompson (1967:24) argues that organizations "tend to seal off their core technologies from environmental influences . . . by buffering their technical cores with input and output components" in order to maintain their autonomy. However, buffering may not be completely successful. Thompson (1967:24) holds that the organization must then assess the extent of environmental influences by examining:

1. constraints that must be faced,
2. contingencies which must be met and
3. variables that can be controlled.

This literature review indicates that organizations enter into interorganizational relationships for many reasons: an

increasingly complex environment, a lack of autonomy and a need for some form of scarce resources for example. Aiken and Hage (1968:588) claim:

> Organizations are pushed into . . . interdependencies because of their need for resources . . . such as specialized skills, access to particular kinds of markets and the like.

Cooperative Work Experience Education Programs

The cooperative program is the result of human service organizations being required to enter into interorganizational relationships. Aiken and Hage (1968) argued that joint ventures in health and welfare organizations helped to provide access to scarce resources for a given program while protecting the autonomy of the organization.

Although Aiken and Hage (1968) claim autonomy is maintained in cooperative programs, Guetzkow (1966), Blishen (1969), and Marrett (1971) claim that autonomy depends on the manner in which organizations are linked together: formalization threatens autonomy, whereas informal arrangements tend to maintain autonomy. A recent study by Andrews (1978) tends to support the arguments of Guetzkow (1966), Blishen (1969), and Marrett (1971). Andrews' (1978) work considered the linkages in a hospital-college setting.

This study is concerned with the linkages between a secondary school and a "noneducation" profit seeking organization. No previous research has been identified that deals with this combination of organizations. However, some comparisons can be

made to the medical education program. The job sponsor, like the teaching hospital, is an integral part of the Work Experience Education program, and as in some medical schools, the secondary school does not own or control the job sponsor. The prevailing arrangement is for secondary schools to enter into agreements with local business and industry for use of part of the facilities and expertise in the field. The secondary school is, for example, concerned with teaching and socialization, and the job sponsor is concerned with profit and production, hence some conflict may arise over divergent goals. Also, some problems may arise over the appointment of supervisors on the job site, an appointment over which the school has no control. Conversely, the job sponsor, short of withdrawing from the program, has no control over the appointment of the coordinator. The issues associated with control and responsibility for the students while on the job site could pose problems. The issues of the evaluation of student performance and sponsor facilities may present the coordinator with serious decisional problems. The job supervisor, like the coordinator, is faced with the issue of student performance and evaluation of the sponsor component of the joint program.

A review of the information systems available for recording of research results revealed no empirical studies of interorganizational relationships between secondary schools and business and industry on those issues identified by Blishen (1969). However, two empirical studies exist that deal with

cooperative programs among human service organizations.

Aiken and Hage (1968:926), studying health and welfare organizations conclude:

> Our assumptions help to explain the steadily increasing frequency of organizational interdependency, especially those involving joint programs [and] at first, these interdependencies may be established with organizations with different goals and in areas that are more tangential to the organization. . . . It is the scarcity of resources that forces organizations to enter into more cooperative activities with other organizations, thus creating greater integration of the organizations. . . .

Andrews (1978:273-274) reports:

> . . . that there may be compelling reasons for some organizations to develop specific patterns of linkage. And the . . . findings suggest that two bases for the relationship exist, one being relatively voluntary and informal while the other is based on formal agreements.

This part of the Chapter has shown that human service organizations enter into interorganizational relationships through cooperative programs, the purposes of which are to acquire scarce resources in order to achieve a specific goal. Such an arrangement, though difficult, is necessary for an adequate Work Experience Education program to exist.

Interorganizational Analysis

Marrett (1971:84-89), in a review of some approaches used by researchers in the study of interorganizational relationships, identified five dimensions along which those relations could be studied. The units of analysis used by Marrett were intraorganizational properties, comparative properties, relational properties, formal contextual properties and non-organized

contextual properties. These properties and their representative variables are presented in Table 1.

The first approach deals with those properties of an organization that affect or are affected by interacting with other organizations. The second approach alalyses interacting organizations by comparing attributes. The third approach, which is central to this thesis, focuses on the linkages between organizations and will be dealt with in greater detail on page 25 of this study. The fourth approach to analysis focuses on the larger organizational setting and the channels and types of influences of that larger setting on the focal organization. Social processes and conditions affecting interorganizational relationships and the extent to which the focal organization is affected by rapid change in the unorganized environment are the unit of analysis in the fifth approach.

Although Table 1 reports five approaches to analysis, a caution is in order. Marrett (1971:88) asserts:

> Although the literature has been organized in terms of five interests, the approaches are not in conflict. In fact, they should be viewed as complementary approaches to the study of interorganizational relations. Barriers to or facilitators of cooperation may derive from the structural characteristics of an organization, from the differences between organizations, from the nature of the relationship, from existing organizational activity, or from social processes. A total analysis of inter-organizational relations requires a thorough understanding of the interplay between variables operating on all levels. But such an analysis is dependent upon the delineation of these variables.

Marrett's comments are well taken. However, this study focused on the relational properties and the specification

TABLE 1

PRINCIPAL APPROACHES TO INTERORGANIZATIONAL ANALYSIS AND REPRESENTATIVE VARIABLES*

Interorganizational Properties	Comparative Properties	Relational Properties	Formal Contextual Properties	Non-organized Contextual Properties
Complexity	Goal similarity	Formality	Extra-local integration	Demographic structure
Innovativeness	Complementarity of resources	Imbeddedness	Local integration	Economic conditions
Openness of communication		Intensity	Size of organizational set	Resource concentration
Accessibility to resources		Reciprocity		Community support
Autonomy		Cooperativeness	History of interlocking relations	
Laws, rules, norms		Symmetry		

*Adapted from Marrett (1971:84)

of variables linking two organizations. This approach deals with the network and its traits and changes and does not consider either the individuals or comparative properties of the organizations involved for they are not central to this study. Andrews (1978:26) observed:

> The clear delineation and analysis of the linkage mechanisms that join human service organizations should provide a useful framework for the examination of inter-organizational relationships that occur when two or more organizations cooperate in the development of a joint program.

Interorganizational Linkages

Turk (1973:37), conducting a study on the influence of municipal government and community voluntary associations on the formation of hospital councils, observed that:

> . . . the integrative significance . . . may rest less on linking individuals to their environment than upon linking organizations to one another, thereby supporting the feasibility of the interorganizational level of analysis.

With respect to organizational units that related to boundary spanning functions, Mindlin and Aldrich (1975:390) also argued for the theoretical validity of studying only structural variables. Boundary spanning units are those units that are dependent on another organization for certain resources, and the total organizational environment is unaffected by the boundary by which it is spanned.

Marrett (1971:95) defined four linkage dimensions that provided a basis for identifying linkage variables found in interorganizational relationships. The linkage dimensions are:

1. degree of Formalization
2. degree of Intensity
3. degree of Reciprocity, and
4. degree of Standardization

Because several analyses of interorganizational relations noted variations in the extent to which the characteristics and requirements of the relationships were explicated, formalization was considered useful to this study. Hall (1972:196) defined formalization as the ". . . organizational technique of prescribing how, when, and by whom tasks are to be performed." Guetzkow (1966:33) claimed that relations between organizations could be loose and informal, whereas other organizational relationships could be quite formal. Marrett (1971:89) held that the consideration of formalization is quite appropriate when applied to interorganizational analysis. The degree of formalization which Marrett (1971:89) defined as the ". . . degree to which the interdependency is given official sanction by the parties involved" may vary from formal written agreements to tacit informal relationships.

There is a general resistance on the part of many organizations to formalize interorganizational activities lest they reduce organizational autonomy. However, Guetzkow (1966) argued that interactions that were found to be mutually satisfying were more likely to be formalized. A consequence of increased formalization of interorganizational relations may be resistance

to change, innovation and freedom of choice (Hall, 1972; Aiken and Hage, 1968). Even so Pfeffer (1972:383) stated that long-term agreements could stabilize interorganizational relations, thus reducing environmental uncertainty.

Whereas highly formalized interactions may result in conflict according to Litwak and Hylton (1962:400), the development of some form of coordinating mechanism may reduce interorganizational conflict. The sort of coordinating mechanism to be developed is said to emerge from the interaction of the extent of organizational interdependence, from the level of awareness and from the degree of standardization of the units being coordinated. The degree of coordination, according to Guetzkow (1966:32), is also important, and ". . . may vary from minimal . . . to maximal. . . ."

Marrett (1971:90) concluded from these views that formalization, the extent to which a coordinating mechanism exists between organizations, is a second indicator. Marrett (1971:91) contended that there should be a direct association between the formal agreements and the degree of coordination. However, this remained as an untested assertion. Coordination, according to Clark (1965), may be unnecessary where formal agreements exist, for the agreement may act as a controlling mechanism. This would depend upon the explicitness of the agreement and the extent to which the responsibilities of parties to the arrangement were delineated.

Thompson (1967) identified another linkage variable related to formalization: the degree to which organizations develop standardized interactions. Standardization, Thompson (1967:17) contends, assures operations between organizational components are consistent with other components that are involved in boundary related activities. Marrett (1971:94), however, defined standardization as ". . . the extent to which the units of exchange are clearly delineated."

Marrett (1971:94) separated standardization from formalization. Hall (1972), Litwak and Hylton (1962) and Andrews (1978) contend that the degree of fixedness of rules and procedures of an organization are two aspects of formalization rather than separate dimensions. Standardization was accepted as a third indicator of formalization.

The degree of intensity of the relationship according to Marrett (1971:91) is a second dimension of interorganizational relationships. Interorganizational relationships appear to differ not only in the extent of formalization but on the amount of involvement required. Involvement could range from informal interaction to those encounters in which critical issues are pursued. One could measure intensity according to Marrett (1971:92) in two ways: the frequency of personnel interaction and the relative resource commitment of the interacting organizations to the relationship.

It follows from the arguments presented that it would be unlikely that a relationship would be informal if an organization has a high resource commitment in a cooperative program. Also,

organizations are not likely to invest considerable resources in a cooperative program because those programs involve other organizations over which they have little or no control.

Marrett's (1971:92) third major interorganizational dimension is the degree of reciprocity between organizations. Levine and White (1961:559) argued that the direction in which exchange occurs will vary. Guetzkow (1966:28) asserted that some parties may exert greater influence in determining the conditions of the exchange between parties than do others and that interdependencies may not be symmetrical. Marrett (1971:93) indicated that the degree of reciprocity does capture the power symmetry of the relationship. Power, according to Salancik and Pfeffer (1974:149), rests usually with those people who are in control of scarce resources within an organization. Power, therefore, would be vested in those organizations that or those individuals who control resources desired by other organizations or individuals. The organization that has control over contingencies vital to resource acquisition by a member organization according to Benson (1975:2-3) is the source of power in an interorganizational relationship. Marrett (1971:93) stated ". . . a critical dimension of interorganizational relations among autonomous groups is the degree of reciprocity, or the mutuality of the relationship."

From the literature which encompassed the issues raised by Guetzkow (1966) and Levine and White (1961) two indicators of reciprocity emerged: the degree to which resources are

mutually exchanged, and the extent to which the terms of the relationship are mutually agreed upon between participating organizations. Schmidt and Kochan (1977:220-222) stated that an integrated view of the power dependency *vis-a-vis* the exchange approach is necessary: the indicators of reciprocity appear to do so.

The integration and differentiation theory of Lawrence and Lorsch (1969:12-13) is another useful concept in this discussion. They argue that when two highly differentiated groups in an organization are required to integrate their efforts, then they must develop complex integrative mechanisms. There is no reason why this concept cannot be applied to two different organizations that require close integration in order to maintain a Work Experience Education program. The integrative mechanisms in this case would be a linkage dimension as well as the ones postulated by Marrett (1971) and Andrews (1978).

Four linkage dimensions and indicators thereof have been identified that could be used as a basis of analysis of inter-organizational relationships. Upon inspection it appears that some of the linkage dimensions are more interrelated than are others. Marrett (1971:95) proposed that two models of inter-organizational linkages could exist in cooperative programs which predict specific relationships among the linkage variables depending upon the existence of certain linkage characteristics. A summary of the models proposed by Marrett (1971) is presented in Table 2. Though Marrett (1971:97) asserts cooperative programs

TABLE 2

THE INTERRELATIONSHIP OF
INTERORGANIZATIONAL DIMENSIONS

Dimension	Model 1	Model 2
Formalization		
Agreement formalization	Low	High
Structural formalization	Low	*
Procedural standardization	Low to Medium	High
Intensity		
Frequency of interaction	Low to Medium	*
Size of resource commitment	*	High
Reciprocity		
Resource reciprocity	Low	High
Definitional reciprocity	Low to Medium	High

*Wide variation: no prediction made for the occurrence of this variable. Adapted from Marrett (1971:95).

should conform to Model 2 such a situation is not likely, for organizations would be hesitant to make the commitments and investments required by this model. It was Marrett's (1971:97) conclusion that "if this is . . . the case, then additional research is needed . . . on the constraints to the realization of the second model."

It seems clear that organizations would tend to avoid formal arrangements with and commit extensive resources to

another organization in the absence of well-defined benefits to the organization. Further, the benefits of interorganizational relationships are often difficult to identify because organizational goals are often ambiguous and obscure and the degree to which benefits are perceived to accrue to the organization through a cooperative program may affect the realization of the second model.

This review of the literature suggests that an examination of interorganizational relationships would be useful, and it was decided that the relational approach as proposed by Marrett (1971) would be appropriate as a framework for this study. The major linkage dimensions identified by Marrett (1971) with explanations by Andrews (1978) are presented in Table 3. An examination of the two models proposed by Marrett (1971) should provide a clear description of the linkage dimensions found in cooperative programs, and it may permit an identification of some of the constraints that may prevent a cooperative program from conforming to the second model.

PROGRAM EFFECTIVENESS

One of the purposes of this study was to judge the perceived effectiveness of the Work Experience Education program. In order to derive a suitable model for program evaluation a literature review was necessary to provide a focus.

TABLE 3

LINKAGE DIMENSIONS, MEASURABLE VARIABLES AND EXPLANATIONS*

Linkage Dimensions	Explanation
A. Formalization of the relationship	A.
Measurable variables:	
a) Agreements: written - tacit	a) The degree to which the exchange is given official sanction - Marrett (1971)
b) Coordination: formal - informal	b) The extent to which an intermediary coordinates the relations - Litwak and Hylton (1962)
c) Procedural standardization: high - low	c) the extent to which procedures are clearly delineated - Hall (1972)
B. Intensity of the relationship	B.
Measurable variables:	
a) Frequency of interaction: high - low	a) The kind and amount of involvement demanded - Marrett (1971) and Hall (1972)
b) Size of resource commitment: high - low	b) The resource commitment required of the relationship - Marrett (1971)
C. Reciprocity of the relationship	C.
Measurable variables:	
a) Resource reciprocity: unilateral - none	a) The degree to which the resources are exchanged - Levine and White (1961)
b) Definitional reciprocity: unilateral - none	b) The degree to which the terms of the interaction are mutually agreed upon - Guetzkow (1966)

Andrews (1978:35)

Evaluation

There are numerous meanings given the term "evaluation" and in order to provide a better grasp of the subject some definitions of the term are presented. Though a short description of some of the evaluation models was considered useful the eclectic model designed by Stake (1967) was used in this study.

Definitions of Evaluation. Dressel (1976:1) contended that evaluation has two aspects and defined it as "both a judgement on the worth of a program, procedure or individual and the process whereby that judgement is made." Stufflebeam (1971:1) defended the Phi Delta Kappan definition as "the process of delineating, obtaining, and providing useful information for judging decision alternatives." Popham (1972:1) claimed that "for most educators the term "evaluation" means appraising the worth of an educational undertaking . . . in order . . . to make decisions It seems to be agreed that evaluation is necessary in order to provide decision-makers with an appropriate data base from which decisions on program modification, continuation or termination can be made.

Evaluation Models. MacKay and McGuire (1971:16) reviewed three evaluation models: (1) those which deal with the formative evaluation of the learning process and the sequence of objectives; (2) those which are concerned with the collection of data to raise and answer issues; and (3) those models which collect data for decision making. These models have been called the Neo-Tylerian, eclectic, and administrative evaluation models, respectively. Stake's eclectic model was used in this study.

Stake (1967) drew heavily on the works of Cronbach (1963), who pointed out the importance of evaluation for decision making, and Scriven (1967) who contended that comparison of programs would have to be considered if an adequate model of evaluation was to be devised. Stake (1967) held that the two major activities of description and judgement of the program being evaluated must be formalized into a systematic procedure, and further, Stake (1967:527) argued that the evaluator would be required to gather pertinent data from different sources. Specifically, the types of data included information relating to any condition existing prior to the teaching process, called antecedents; personal encounters among the constituents of the educational process, called transactions; and the products of the educational process, called outcomes. Stake argued that these types of information ought to be used to stimulate thought about the data and not used merely to categorize the data. Stake noted also that there were two bases for judging a program: (1) absolute standards as reflected by personal judgements and (2) relative standards in comparing one program with other programs. The first basis, absolute standards as reflected by personal judgements, was considered an appropriate base from which to judge Work Experience Education program effectiveness which is the subject of this study. The second base, comparing one program with other programs, was not the focus of this study of Work Experience Education programs, hence no comparisons were made between programs except on the variables specified in Chapter 3.

Constituent Evaluation of a Program. The evaluation of any educational program is a complex task and the kinds of analysis required by the rigorous application of the Stake model are recognized. For the purposes of this study, however, the use of absolute standards as opposed to comparative standards on the importance and attainment of benefits as perceived by students, coordinators and supervisors was considered a reasonable approach because these groups are most closely associated with the program.

Student evaluations of programs have been criticized on the basis that they provide only a narrow perspective on the course program. Many teachers, in fact, reject the notion that students can or will provide meaningful contributions to evaluation (Anderson, and others, 1975:345). When compared to other evaluation methods currently available, Centra (1973:8) claimed that student perceptions were no less valid than other methods. Frey (1976:336-377) and Gmelch and Glasman (1977:45-55) averred that students were a reliable data source for information on evaluation and program effectiveness. Gmelch and Glasman (1977:45) claim, "Students . . . have a unique perspective from which to view effectiveness." Porter and others (1976:49) contend that the interpretation of the environment in which one exists depends on the nature of the stimuli collected and the previous experience of the actor in the organization. Images or impressions received from the present environment are compared to past experiences thus allowing the individual to form a

concept of what exists. The use of perceptual data as a means of assessing effectiveness was considered appropriate for the purposes of this study.

The review of the literature on evaluation indicated that the Stake (1967) model emphasizing antecedents, transactions and outcomes was appropriate for this study. The major indicators of program effectiveness used in this study were as follows:

1. Student, coordinator and supervisor perceptions of priority and attainment of anticipated benefits (outcomes and antecedents).

2. Student, coordinator and supervisor perceptions of the extent of interorganizational linkages (one type of transaction).

CONCEPTUAL FRAMEWORK USED IN THIS STUDY

Mouzelis (1968:56) argued that an analytic and conceptual framework:

> . . . sets the theoretical boundaries; it discriminates between relevant and irrelevant properties; it indicates what is going to be explained and what is going to be considered as given.

Secondary schools are complex organizations offering a multitude of programs and are organized into various departments. The importance of understanding how departmentalization and sub-unit dependencies can pose potential problems in terms of sub-unit interdependencies, coordination and resource acquisition was discussed at length by Thompson (1967:25-38). In order to handle increasing interdependencies and coordination with external organizations, the boundary unit is formed. The

importance of boundary units and individual boundary roles in handling relations between organizations was discussed by Guetzkow (1966:18-22) who contended that the functioning of an organization could be affected by the absence or poor development of such units.

Because a Work Experience program can be conceived as a boundary unit of a secondary school as can the job sponsor that provides the field experience, the integration concept appeared to be useful. Each boundary unit is distinguished by different goals and each boundary unit operates from a different authority base and with different kinds of interpersonal relations. Hence, the two boundary units are functionally differentiated in the Lawrence and Lorsch sense. In addition, the program is expected to be sequential and each component, the school and the work site, is dependent on the other. Thus, integration emerges as important to the success of the program.

Since a basis for comparison was required, the effectiveness of the Work Experience Education program was examined following that part of the model developed by Stake (1967) which emphasized antecedents, transactions and outcomes. Figure 1 is an illustration of the conceptual relationships of organizational sub-units, linkage dimensions and program effectiveness.

The primary focus of this study was at the relational level and on the specification of variables linking one organization to another. The clear specification of mechanisms linking a human service organization with business and industrial

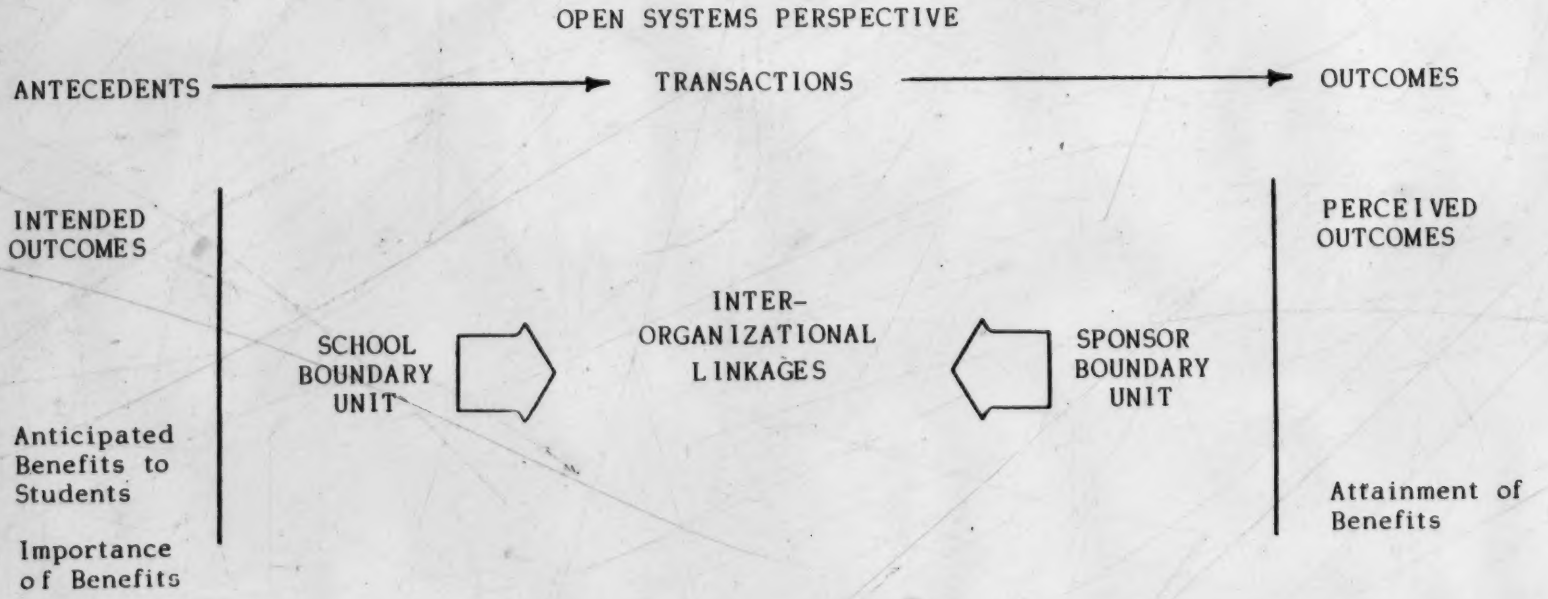

Figure 1

Conceptual Framework of Relationships Among Sub-units, Linkage Dimensions and Program Benefits

organizations should provide a theoretical relationship between the forms of linkages and program effectiveness.

This chapter presented the conceptual structure for a comparative analysis and description of the linkage dimensions that join organizations involved in interorganizational relationships.

The broader view provided by the open systems approach seemed to encompass the dynamic nature of organizations in terms of their intraorganizational and extraorganizational environments. The open systems approach was also perceived as the conceptual basis for the examination of interorganizational relationships. Further, this perspective supplied the rationale for the selection of cooperative programs as a valid study. In this approach the use of data collection from respondents' perceptions was in part supported by an open systems concept.

In order to provide a basis for understanding the conditions, interactions and results of the relationships in interorganizational structure, clientele and processes, an overview of the theoretical aspects of interorganizational relationships seemed necessary. Issues, such as organizational autonomy and environmental impact on organizations, were discussed. A review of the literature indicated that medical education programs were examples of the study of interorganizational relationships.

In an attempt to determine if the relational approach was a viable approach to the study of cooperative programs

this research effort examined the forms of linkages that join organizations. Evidence to support the idea that examining the linkage dimensions joining organizations was a useful method to study interorganizational relationships was found in the literature, the theory and the research. A conceptual framework for the study of relational dimensions was presented.

A comparison of the findings on linkage dimensions to some measure of effectiveness was also needed; therefore, a review of the literature on program effectiveness was undertaken and the evaluation model developed by Stake (1967) that emphasized antecedents, transactions and outcomes seemed most appropriate for the study.

Finally, this chapter presented a conceptual scheme that combined the relational framework of Marrett (1971) with the concept of integration espoused by Lawrence and Lorsch (1971). It seemed reasonable to expect that a description of the linkages found in human service organizations would provide a relationship between the forms of linkage and program effectiveness.

In Chapter 3 the research design and the methodology of the study are described.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

This chapter deals with four aspects of the study: (1) research design, (2) instrument development, (3) instrument validation and (4) research methods used to conduct the study.

RESEARCH DESIGN

This study is concerned with the relationships of the interorganizational variables of formalization, intensity, reciprocity and program integration to the perceived priorities as well as the perceived attainment of the anticipated benefits of Work Experience in secondary schools in Alberta.

Problems and Sub-problems

1. To identify the perceived priorities assigned to the anticipated benefits of Work Experience courses.

    1.1 To determine the priorities assigned to the anticipated benefits by the sub-population involved in the Work Experience program.

    1.2 To determine the degree of association between the priorities assigned to the anticipated benefits by coordinators, by students and by supervisors.

2. To determine the perceived extent to which the anticipated benefits of Work Experience course were attained.

    2.1 To determine the extent of attainment of the anticipated benefits as perceived by the sub-population involved in the Work Experience program.

2.2 To determine the degree of association between the attainment scores assigned to the anticipated benefits by coordinators, by students and by supervisors.

3. To identify the types of linkages employed in Work Experience Education.

3.1 To determine the extent of formalization between schools and sponsors.

3.2 To determine the frequency of interaction between schools and sponsors.

3.3 To determine the extent of reciprocity between schools and sponsors.

3.4 To determine the extent of program integration between schools and sponsors.

4. To determine the association among program priorities, program benefit attainment and linkage dimensions.

4.1 To determine the degree of association between the priorities assigned to the anticipated benefits and each interorganizational variable.

4.2 To determine the degree of association between the attainment scores assigned to the anticipated benefits and each interorganizational variable.

The unit of analysis was the school Work Experience program at the work site.

Focus of the Study

The focus of this study was on the linkages that join a secondary school to a sponsor in a Work Experience program. Work Experience programs were chosen because there seemed to be merit in examining the extent and nature of linkage dimensions in a program that has had little attention from researchers.

Research Variables

Program effectiveness was chosen as the primary variable to be examined. In order to complete this investigation, linkage dimensions were accepted as secondary variables.

Linkage variables. Marrett's (1971) concept of relational properties included four primary linkage dimensions which Andrews (1978) reduced to three. Andrews (1978) argued that these linkage dimensions were (1) formalization, (2) intensity, and (3) reciprocity of the relationship. A fourth linkage variable, program integration, was added by the researcher. The term integration is used as defined by Lawrence and Lorsch (1969:13) and is the "perceived state of collaboration between major pairs of sub-units."

Effectiveness variables. For the purpose of this study it was decided to record student, coordinator and supervisor priorities for and perceptions of the attainment of the anticipated benefits of Work Experience.

Respondents

The coordinators, invited to participate in this study, were all certificated staff members of secondary schools who were engaged in administering and/or teaching Work Experience courses in school and who were engaged in off-campus supervision of students. Twenty-seven coordinators were asked to participate in the study.

The student respondents were secondary school students who were registered in secondary school Work Experience courses. There were 136 students who were asked to participate in this study.

Supervisor respondents who participated in this study were engaged in supervising and instructing students on behalf of a sponsor on a work site. One hundred and thirty-six supervisors were asked to participate in the study.

INSTRUMENT SELECTION AND DEVELOPMENT

General Approach

In order to measure respondents' perceptions of linkage dimensions and effectiveness, two instruments were required. It was concluded that the perceptions of coordinators and supervisors should be recorded on all items of both instruments, whereas students would complete a questionnaire on priorities, realized benefits and selected items dealing with linkage dimensions about which they were expected to have knowledge.

A search of available instrumentation revealed only one validated instrument dealing with integration in an educational context (Andrews, 1978:292-306). However, while Andrews' (1978) instrument was not considered suitable to Work Experience, it did provide a basis for the design of the School-Sponsor questionnaire that contained 37 questions relating to the four linkage dimensions. Instruments that dealt with the issue of effectiveness were numerous but did not deal with the variables con-

sidered in this study. The instrument that dealt with priorities and realized benefits was designed by the researcher on the basis of Worthen and Sanders' (1973:105) argument that objectives must be important as well as attained.

An initial pool of 137 questions was generated by the researcher which sought information about the respondents, the programs and the linkages as well as priorities and perceived benefit attainment.

These questions were submitted for reaction and modification to a panel of experts. The panel of experts was comprised of graduate students, university faculty, high school students, job supervisors, and public school teaching personnel. The pool of items was analysed for redundancy and relevancy then consolidated and an interview schedule was designed. Twelve students, 12 teachers and 4 job supervisors were interviewed. The results of the interviews were compared to the initial pool of items and this resulted in a further reduction of items to 41 linkage questions, 56 items on program priorities and perceived benefit attainment and 15 personal and program questions. This pool of items was then submitted to students, coordinators and job supervisors who were requested to provide comments on content, time, ambiguity, format and readability. Some of the questionnaire respondents were interviewed to determine their understanding and interpretation of the questions posed in the questionnaires. These interview responses were compared to documents on file in the school so as to confirm validity. For approximately 90% of items

this validity check was confirmed: the questionnaires were validated for content and face validity by converging interview, questionnaire and document data. This exercise resulted in reducing the document's size to a point where completion could be achieved within 15 to 20 minutes for the student questionnaire and within 25 to 30 minutes for the coordinator and job supervisor questionnaires.

This instrument was administered to four students, one coordinator and one job supervisor. The data derived from these questionnaires again converged with the data gained from the previous validity studies. On the basis of this approach it was assumed that validity had been reasonably established.

The Specific School-Sponsor Relations Instrument

In order to assess school-sponsor relations a pool of items that dealt with each interorganizational variable was generated. Thirty-seven questions were distributed in the following way: 12 items on formalization, 8 items on intensity, 8 items on reciprocity, 8 items on program integration and one open-ended question. Each item was in the form of a statement relating to some of the different activities that were associated with school-sponsor relations. The respondents were invited to react to each statement by circling the most appropriate of the five response categories provided for each statement. Five point scales were designed for each statement.

The respondents were chosen from the Work Experience program offered at Lindsay Thurber Comprehensive High School

located in Red Deer, Alberta, Canada (Table 4). This program was chosen because it was not in the sample and there was no reason to believe that the interorganizational linkage measures of this program would substantially differ from other programs. Second, this secondary school is located in a medium-sized (40,000 population) city in the central part of the province and draws many of its students from rural, as well as urban, areas.

TABLE 4

PILOT STUDY RESPONDENTS

Questionnaire	Students	Coordinators	Supervisors
Requested	35	1	35
Returned	35	1	11

The superintendent of schools for the Red Deer School District was approached for permission to conduct a pilot study in his jurisdiction. Permission was granted and contact was made with the Work Experience coordinator of Lindsay Thurber Comprehensive High School to arrange for questionnaire distribution to the respondents. Questionnaire distribution took place in the week of November 19, 1979.

The analysis of responses revealed a number of weaknesses in both the wording of items and in the scales associated with the response items. The final version of the instrument incorporated all germane comments and suggestions from the

respondents. A copy of the final form of the instrument is included in Appendix A.

Effectiveness Instrument

In order to generate indicators of antecedent, transactional and outcome data the Stake (1967) evaluation model was used in this study. A perceptual measure of program effectiveness was considered appropriate for this study since a variety of data sources was examined. An instrument was designed that dealt with student learning activities such as skill development, assumption of responsibilities, and career opportunities to which students, coordinators and supervisors could react. Dressel (1976) pointed out that the concept of program effectiveness is an umbrella concept which is difficult to measure and cannot be dealt with in a simple fashion. Further, writers disagree on both the factors involved in assessing program effectiveness and on how those factors should be measured. Even so, Mott (1972:27) argued that an eclectic approach to effectiveness is valid and reasonable. The limitations of an instrument designed to measure effectiveness are recognized. However, the decision was made to proceed on the basis that the instrument was adequate for the purpose of this exploratory study. A copy of the final form of this instrument is contained in Appendix B.

The instrument contains 18 statements about anticipated benefits to students. Respondents were requested to react to each statement in terms of its perceived importance and its perceived attainment. Two five-point scales were employed using categories

of "not important" to "very important" and "never happens" to "frequently happens." This instrument was pilot tested under the conditions set out for the School-Sponsor Relations Instrument. In addition to completing set questions respondents were also given the opportunity to indicate other positive and negative aspects associated with the program. Respondents were also encouraged to report criticism of the draft instrument and suggest revisions that could improve the clarity and understanding of the instrument. These suggestions were tested with a randomly selected number of students on what they thought important to learn as a result of Work Experience. The information gained in the interview validated the results of statements in the questionnaire. An extensive interview was held with the school Work Experience coordinator and again the priorities stated by this person converged with student responses.

Organization Instrument

Interorganizational data were also gathered which strongly supported the coordinator's responses with respect to the formalization, reciprocity and integration variables. No record could be found relating to the intensity variable. Table 5 reports the source of documentation on organizational and program effectiveness variables.

Summary of the Pilot Study

Each of the instruments used in the pilot study and in the major study contained personal and general program questions as well as questions on interorganizational relations, priorities

TABLE 5

VERIFICATION OF ORGANIZATIONAL AND EFFECTIVENESS INSTRUMENTS

Instrument Variables	Source of Information
Formalization	Written document
Intensity	Student/ccordinator interviews
Reciprocity	Student/coordinator/ administration interviews
Effectiveness	Written document/interview

and perceived benefit attainment. Three types of questionnaires were used: a Student Questionnaire, a Coordinator Questionnaire and a Job Supervisor Questionnaire. The sources and nature of the data are reported in Table 6.

TABLE 6

SOURCES AND NATURE OF QUESTIONNAIRE DATA

Data	Student	Coordinator	Supervisor
Importance	X	X	X
Attainment	X	X	X
Integration	X[a]	X	X
Formalization	X[a]	X	X
Intensity	X[a]	X	X
Reciprocity		X	X

[a]On selected items

RELIABILITY AND VALIDITY OF THE INSTRUMENTATION

If meaningful conclusions are to be drawn using questionnaire data, questions of reliability and validity are certain to be posed. Engelhart (1971:151) argued:

> The characteristics of a test most fundamental to its effectiveness . . . is its validity--how well it measures what it is designed to measure . . . . Similarly reliability . . . refers to the consistency with which the scores on a test are related to the scores on the same test given a second time.

Reliability

The exploratory nature of this study posed problems in establishing the reliability of the instruments used. The purpose of this study was to investigate interorganizational linkages, priorities and perceived benefit attainment of a sample of Work Experience programs at one point in time. However, the results of the pilot test were considered as evidence of reliability. Even so, Englehart (1971:89) argues, ". . . a relatively unreliable test may have adequate reliability for group comparisons."

Validity

In order to validate the instruments used in this study a major effort was made to ensure that the instrument dealt with the areas under question, and as reported earlier, a pilot study was undertaken. Comments and suggestions were incorporated where they did not affect the purpose of this study. The final draft of the instruments was submitted to a panel of experts and on that basis it was concluded that content validity had been

reasonably established. Ex-post validity was assessed by a section under which comments from respondents were solicited. Since no comments appeared that could be interpreted as relating to validity the instrument was assumed to be reasonably valid.

Format. It is possible that the format adopted by the researcher for the questionnaires could result in a "response set." Though the variables under investigation were not identified specifically, the questions with respect to the School-Sponsor Relations Questionnaire were grouped according to category. However, it was thought preferable to assist the respondents in concentrating their attention on one particular variable at a time. The same criticism is germane to the "Opinionnaire on Student Learning Activities." In this instance each statement required two responses. In order to achieve the goal of a shorter instrument it was decided to solicit two types of responses for each statement. Finally, there was no indication that a response set did develop with respect to the pilot-tested population.

Programs

Twenty-six secondary schools offering Work Experience programs were selected for this study: they represented 16.77% of all such programs. The sample included 8 schools located in Edmonton and Calgary and 18 schools located outside these city jurisdictions. The city schools were originally matched for size. However, after contacting the appropriate officials in the Calgary School District it was found that only three schools were offering a sufficiently large program in the first semester. The three

schools that were used were not on the original sample. One Edmonton Public school refused to participate in the study, therefore another school was substituted. All non-city schools were chosen at random using a table of random numbers (McCall, 1975:366). The distribution of city and non-city schools that participated in the study is reported in Table 7.

TABLE 7

CITY AND NON-CITY SCHOOLS PARTICIPATING IN THE STUDY

Schools	Number in Sample	Number in Population
City	8	34
Non-city	18	119

There were four reasons for choosing the sample in this manner. First, because Work Experience Education courses attract a low enrollment in the first semester of the school year, some schools do not offer the course at this time. Second, all schools in the population were public or separate schools that offered secondary school courses at the grades 10, 11 and 12 levels and also offered Work Experience Education courses. Third, the method of sample selection was chosen to ensure similar environmental contexts. The opportunities for students to investigate differing occupations is much greater in the city[1] than outside the city.

[1]City is defined as Edmonton and Calgary.

Also the ratio of student/sponsor placements in the city tends toward 3:1 whereas the ratio outside the city is in the order of 1:1.[2] Fourth, since the Work Experience program is part of a provincial curriculum some value could be derived from examining differences in programs between two large city jurisdictions and between large city jurisdictions and smaller non-city jurisdictions.

Respondents

All certificated teaching staff who were designated as Work Experience coordinators, the Work Experience students and the students' job site supervisors were included in the research population (Table 8). These respondents comprised the groups that could be expected to possess the knowledge sought about the Work Experience program.

RESEARCH METHODOLOGY

Permission to Conduct Research

Permission to conduct the investigation of the 26 Work Experience programs was gained by contacting the superintendent or his designee in each of the jurisdictions involved. In each instance a telephone call, describing the project and seeking permission to contact people in their jurisdiction, was made. In all cases, but one, the response was favorable. Three in-person presentations were necessary. A copy of the telephone interview schedule is contained in Appendix C.

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[2] Field Services, Alberta Education

TABLE 8

CITY AND NON-CITY POPULATION DISTRIBUTION OF STUDENTS, COORDINATORS AND SUPERVISORS

Respondent Group	City	Non-city
Student	249	538
Coordinator	9	18
Supervisor	249[a]	538[a]

[a] These figures are estimates only.

Data Collection

Data collection took place during the week of January 7, 1980. Questionnaires were mailed to each school for distribution to each respondent. Each questionnaire was accompanied by letters of instruction (Appendix D) and a stamped, addressed envelope to facilitate instrument return and respondent anonymity. Telephone reminders (Appendix E) were issued at the end of weeks three, four, and five.

Data Treatment

During week six all data were coded on data processing cards for analysis. Responses to questions relating to personal and program data (Appendix F) were coded as required by the computer program. Responses to all items on both instruments were coded on a five-point scale and in each case a low score would be assigned a "1" and a high score would be assigned a "5".

Frequencies and distribution of responses. The Statistical Package for the Social Sciences (SPSS) program was employed to calculate and analyze the frequencies and percentage distribution of responses for all items from the research instruments.

Analysis of personal and program variables. Coordinator, student and supervisor data on personal and program variables were cross tabulated using the SPSS sub-program "Crosstabs." The chi square test of statistical significant differences was used to determine if differences existed among groups of respondents.

Analysis of student, coordinator and supervisor perceptions on interorganizational linkages. Six items on linkages were common to student, coordinator and supervisor questionnaires. In order to determine the extent of agreement among groups on the six items, analysis of variance was used. As a result the presence of differences between students, coordinators and supervisors in perceived linkages was examined.

Analysis of coordinator and supervisor perceptions on interorganizational linkages. The School-Sponsor Relations Questionnaire was composed of 36 items which provided the data necessary to compare the perceived extent of linkages for each program. A "t" test was used to determine whether there was disagreement between coordinators and supervisors on linkage dimensions.

Analysis of student, coordinator and supervisor perceptions on program effectiveness. The Work Experience Opinionnaire on Student Learning Activities was comprised of 18 questions requiring

the following judgements; 1) the priority of the item and 2) the perceived degree of attainment for the item with respect to student learning. Analysis of variance was used to determine whether there was disagreement on the variables among groups.

Analysis of findings by program. In order to determine the extent of association between each interorganizational variable, the perceived priorities, and the perceived extent of attainment of the anticipated benefits, a Pearson Product-Moment Correlation statistic was used. This treatment allowed the researcher to determine if the variables were related and the extent of that relationship.

These treatments permitted the research findings to be analyzed and discussed in relation to the research problem and sub-problems posed at the outset of this study.

SUMMARY

The research design for the study, procedures employed in instrument development and subsequent refinement of the instruments used in this study were reported in this chapter. Operational definitions were presented as was a description of the research methods and an explanation of the treatment of the data. The research variables were explained and the respondents were identified. A pilot study was undertaken since all instruments were designed by the researcher. This comprised the first section of the chapter. The results of the pilot study were reported.

Information regarding the methods used in the selection

of programs and respondents was presented in the final section of this chapter.

The next chapter presents a profile of the respondents in the study, and an analysis of the findings related to personal and program variables.

CHAPTER 4

DESCRIPTION OF THE RESPONDENTS AND OF THE PROGRAM

This chapter has two purposes: to describe the respondents who participated in the study and to describe the Work Experience program characteristics based upon the questions posed in the research instruments (Appendix F).

This part of the study is organized into three sections. Part one provides a summary of the number of questionnaires returned by students, coordinators and supervisors. Part two describes the respondents who participated in the study. The last part of this chapter describes some Work Experience program characteristics.

QUESTIONNAIRE RESPONSE RATES

One of the factors affecting valid generalizations from questionnaire data is the rate of instrument return. Kerlinger (1973:414) claims, "Responses to mail questionnaires are generally poor. Returns of less than 40 to 50 percent are common. Higher percentages are rare." He goes on to argue that:

> . . . there are means of securing larger returns and reducing deficiencies but they are often ineffective. If the mail questionnaire is to be . . . used every effort should be made to obtain returns of at least 80 to 90 percent. . . .

A summary of questionnaire returns from students, coordinators and supervisors is provided in Table 9. Of the 289 students, coordinators and supervisors, 191 (66.1%) returned the

instrument. Student, coordinator and supervisor groups returned 71.8%, 88.8% and 55.7% of the instruments respectively. The rates of return fall within Kerlinger's range of expected and ideal return rates.

TABLE 9

SUMMARY OF QUESTIONNAIRE RETURNS BY STUDENTS, COORDINATORS AND SUPERVISORS

Respondents	Possible Return	Actual Return	Percentage Return
Students	131	94	71.8
Coordinators	27	24	88.8
Supervisors	131	73	55.7
Total	289	191	66.1

DESCRIPTION OF THE RESPONDENTS

In order to describe the respondents in this study, data were collected on personal characteristics of the respondent groups. Students were requested to provide information on six items; coordinators were asked to respond to eight items; and supervisors were asked to respond to five items. This was done in order to discover if differences existed within the student, the coordinator or the supervisor respondent groups.

Student Characteristics

Fifty-seven female and 37 male students responded to the questionnaire.

The data revealed that no student less than 16 years of age was registered in Work Experience Education (Table 10).

TABLE 10

STUDENT AGE

Age	Number	Percent
16 years	30	31.9
17 years	45	47.9
18 years	17	18.1
Over 18 years	2	2.1

The greatest number of students was in the 17 year old category with only 2.1% over 18 years of age. Nearly 80% of students in the sample were 16 or 17 years of age.

No grade 10 student appeared in the sample. Slightly more than two-thirds of student respondents were registered in grade 12 (Table 11).

TABLE 11

STUDENT HIGH SCHOOL GRADE

Grade	Number	Percent
11	31	33.0
12	63	67.0

The type of high school program in which students were enrolled is illustrated in Table 12. Non-matriculation students accounted for nearly three-quarters of Work Experience enrollment.

TABLE 12

STUDENT HIGH SCHOOL PROGRAM

Program	Number	Percent[a]
Matriculation	24	25.5
General Diploma	57	60.6
Vocational	7	7.4
Trades and Services	3	3.2
Other	3	3.2

[a] Totals on this and subsequent tables may not equal 100 due to rounding.

Work Experience courses are also attracting a fair number of matriculation students (25.5%).

There was a relatively even distribution of students registered in Work Experience 25 and 25/35 courses (Table 13). These courses accounted for 76.7% of all registrations in Work Experience.

The majority of students reported occupational[1]

[1] For the purpose of this study occupations and jobs were grouped into three categories: (1) those requiring university training, (2) those requiring other postsecondary training and (3) those that did not require any postsecondary training.

TABLE 13

STUDENT REGISTRATION IN
WORK EXPERIENCE COURSES

Course	Number	Percent
Work Experience 25	37	39.4
Work Experience 35	21	22.3
Work Experience 25/35	35	37.2
No response	1	1.1

investigations associated with non-postsecondary education (Table 14) and slightly more than one third of the student sample named occupations that required some postsecondary training. Slightly less than one tenth of students reported occupational investigations normally associated with university education.

TABLE 14

OCCUPATIONS INVESTIGATED

Occupation	Number	Percent
University	9	9.7
Postsecondary	33	35.1
Non-Postsecondary	40	42.5
No Response	12	12.7

Summary of the responses. A perusal of the data suggested that a linkage may exist between student age and a number of other student characteristics. As well, there may be a connection between grade level and other characteristics:

1. The incidence of males appears to increase with age.

2. Younger students were most likely registered in the matriculation program.

3. Older students tended to register in the 25/35 course.

4. Students in the higher grades tended to enter the non-matriculation program and tended also to register in Work Experience 25/35.

The typical Work Experience high school senior tended to be an older male in grade 12 in a non-matriculation program. His preference would likely be the Work Experience 25/35 course and an occupational choice that does not require matriculation standards.

Coordinator Characteristics

Three females and 21 males responded to the questionnaire.

An examination of the data revealed that all respondents were less than 60 years of age (Table 15). While the majority of the coordinators reported ages between 31 and 40, a large number

of coordinators fell into the 41 to 60 year age range. The youngest group of coordinators was also the smallest group. The majority of coordinators in the sample reported ages between 31 and 50.

TABLE 15

COORDINATOR AGE RANGE

Age Range	Number	Percent
20-30	1	4.2
31-40	13	54.2
41-50	6	25.0
51-60	4	16.7

Coordinator education ranged from some university training to a completed graduate degree (Table 16). Two-thirds of those

TABLE 16

COORDINATOR EDUCATION COMPLETED

Education	Number	Percent
Some University	1	4.2
Bachelor Degree	7	29.2
Some Graduate Work	3	12.5
Graduate Diploma	5	20.8
Graduate Degree	8	33.3

coordinators polled reported at least some graduate training. Nearly two-thirds of coordinators possessed the baccalaureate degree or a graduate degree.

Coordinators reported that they spent more than half of their time as a teacher (Table 17). One-quarter of the res-

TABLE 17

MAIN FUNCTION OF COORDINATOR

Function	Number	Percent
Principal	3	12.5
Vice-Principal	3	12.5
Counsellor	3	12.5
Teacher	12	50.0
Other[a]	3	12.5

[a] A telephone call determined that two people had 1/2 time designations as teacher and coordinator.

pondents reported an administrative designation. Three-quarters were designated as counsellor, teacher or coordinator. One-half of all coordinators' main function in school related to classroom teaching.

Work Experience coordinators' main teaching responsibilities were reported to be mostly in the general diploma program (Table 18). A relatively high number of coordinators were teaching in the matriculation program. Slightly more than 70% of the coordinators in the sample taught in the non-matriculation areas.

TABLE 18

COORDINATOR MAIN TEACHING RESPONSIBILITY

Program	Number	Percent
Matriculation	7	29.2
General Diploma	10	41.7
Vocational	0	0
Trades and Services	5	20.8
Other	2	8.3

The length of time coordinators had been in the teaching profession ranged from 6 to 27 years. Table 19 illustrates

TABLE 19

COORDINATOR LENGTH OF SERVICE IN THE TEACHING PROFESSION

Length of Service	Number	Percent
10 years or less	3	12.5
11 to 15 years	12	50.0
16 to 20 years	3	12.5
21 years or more	6	25.0

coordinator length of service categories. The greatest number of coordinators reported between 11 and 15 years service in the teaching profession. One-quarter of this respondent group

possessed 21 or more years of service. Another quarter was accounted for in the 10 year or less and in the 16 to 20 year service categories.

The length of service outside of the teaching profession yielded another piece of information (Table 20). Nearly 30% of the

TABLE 20

COORDINATOR LENGTH OF SERVICE
OUTSIDE THE TEACHING PROFESSION

Length of Service	Number	Percent
1 to 5 years	12	50.0
More than 5 years	5	20.8
No Response	7	29.2

respondents did not answer the question. However, 50% of the responding coordinators had five years or less of experience outside education and more than 20% had more than five years.

The last item of personal information on coordinators related to their direct personal involvement in the Work Experience Education program. This group reported between one and nine years of experience with over half in the four to six year range (Table 21).

TABLE 21

COORDINATOR INVOLVEMENT IN PROGRAM

Years Involved	Number	Percent
1 to 3 years	10	41.7
4 to 6 years	13	54.1
7 to 9 years	1	4.2

Summary of responses. A perusal of the data suggested that a linkage may exist among age, sex, level of education, main function in school, main teaching responsibility and other variables.

1. Female involvement in the non-matriculation program tended to be less than the male. 2. Males also tended to be involved in the program for a longer period of time.

The "typical" Work Experience coordinator tended to be between 31 and 40 years of age, possessed a graduate degree, was a teacher in the general diploma program, had between 11 and 15 years in the teaching profession, had spent from 1 to 5 years outside the profession and had been involved in the Work Experience program for a period of 4 to 6 years.

Supervisor Characteristics

Thirty-three females, 38 males and 2 unclassified supervisors responded to the survey.

The data reported in Table 22 revealed that the majority of supervisor respondents were in the 31 to 40 year old category.

TABLE 22

SUPERVISOR AGE RANGE

Age Range	Number	Percent
20 or below	1	1.4
21 to 30	20	27.4
31 to 40	29	39.7
41 to 50	15	20.5
51 to 60	5	6.8
Over 60	1	1.4
No response	2	2.7

followed by the 21 to 30 year and the 41 to 50 year categories in that order. The fewest supervisors were found to be 20 or below and over 50 years of age, both of which accounted for less than 10% of the sample.

Nearly 60% of supervisor respondents reported having completed senior high school (Table 23). Slightly more than 25% of the respondents reported some postsecondary education while 11% reported the completion of a junior high school education. Nearly 3% of supervisors did not respond to this question.

TABLE 23

SUPERVISOR EDUCATION COMPLETED

Age Range	Number	Percent
Junior high school	8	11.0
Senior high school	43	58.9
College diploma (2 year)	5	6.8
University degree (4 year)	8	11.0
Graduate degree	7	9.6
No Response	2	2.7

The number of years of personal involvement in Work Experience by supervisors ranged from one to nine (Table 24).

TABLE 24

SUPERVISOR INVOLVEMENT IN PROGRAM

Years Involved	Number	Percent
1 to 3 years	48	65.8
4 to 6 years	18	24.7
7 to 9 years	5	6.8
No Response	2	2.7

The greatest number of supervisors had three years or less of direct involvement in the Work Experience program. Nearly 25% of the supervisor group reported having spent from four to six years in the program, whereas less than 7% had more than six years of direct involvement. Nearly 3% of this group did not respond to the question.

The last personal characteristic of supervisors to be investigated in this study related to the number of years of full-time employment since leaving school (Table 25). Nearly half of

TABLE 25

YEARS OF FULL-TIME EMPLOYMENT

Years of Employment	Number	Percent
1 to 10 years	33	45.2
11 to 20 years	23	31.5
21 to 30 years	9	12.3
Over 30 years	4	5.5
No Response	4	5.5

the respondents reported 10 years or less of full-time employment since leaving school and nearly one-third of the sample claimed between 11 and 20 years of such experience. Less than one-fifth reported 21 or more years of full-time employment.

Summary of the responses. The same method was used to analyze supervisor responses as for the previous groups. Some connections appear to exist among several of the personal supervisor characteristics:

1. A linkage may exist between supervisor age and the number of years of direct involvement with the Work Experience program. The older Work Experience supervisors tended to be associated with the program longer than their younger colleagues.

2. The level of supervisor education and years of full-time employment appear to be pertinent. Newer supervisors tended to be better educated than their older colleagues.

The typical Work Experience supervisor may be of either sex, between 31 and 40 years of age and possesses a senior high education. The typical supervisor is a relative newcomer to the program with no more than 3 years of experience with the Work Experience program, and less than 10 years of full-time employment since leaving school.

DESCRIPTION OF THE PROGRAM

This section, concerned with selected Work Experience program characteristics, was completed to determine if differences existed among programs.

Only one question was common to all three groups: the type of work to which students were exposed. Students were asked to indicate the type of activity observed; coordinators were

requested to indicate the type of activity to which most students were exposed; and supervisors were invited to describe the type of work in which their firm was engaged. The results of this examination are contained in Table 26. It seems clear that

TABLE 26

STUDENT, COORDINATOR AND SUPERVISOR PERCEPTIONS OF FIRM ACTIVITIES

Firm Activity	Student	Coordinator	Supervisor	Total
Jobs varied	31	11	36	78
Jobs seldom varied	59	11	34	104
Jobs never varied	3	1	0	4
No Response	1	1	3	5

students were being exposed to a relatively varied business and industrial environment where some variation in jobs was evident. Only 2% of the sample indicated no variation in activities.

Program Characteristics:
Coordinator Report

Coordinators were requested to answer five questions relating to features of their program.

Schools had offered the Work Experience program for an average of 6.5 years with a mean of 42 students enrolled in all classes of Work Experience Education per school. Schools averaged 224 stations each but only 32 stations were being

used. The coordinator respondents also indicated that slightly more than 26% of students were offered employment as a result of Work Experience. These data are illustrated in Table 27. An

TABLE 27

COORDINATOR REPORT ON GENERAL PROGRAM CHARACTERISTICS
N = 24

Program Characteristic	$\bar{X}$	Range	Median
Years School has offered Work Experience	6.5	3-9	6
Students Currently Enrolled	42	10-100	33
Stations Currently Available	244	9-999[a]	44
Stations Currently Being Used	32.3	3-100	24.5
Percentage of Students Offered Employment	26.0	10%-70%	20.6%

[a]Two respondents indicated more than 1,000 stations available.

examination of the median reveals, however, that approximately half of the schools had 44 or fewer stations available; that slightly more than half of the available stations were being used; and that approximately one-fifth of the students in Work Experience had been offered employment.

Summary of the findings. Relationships existed among a number of program characteristics.

A relationship existed between the number of years a school had offered a Work Experience program and the number

of students enrolled in the program, and the number of stations currently being used by the school. As the number of years increased so too did student enrollment and work stations being used. Last, as the number of stations available increased, there was a corresponding increase in the number of stations being used.

It would appear that schools had been offering the program for 6.5 years and enrolled some 42 students. The average school had access to 224 sponsors of which 32 were being used. Work Experience resulted in 26% of students being offered employment according to coordinator observations. However, half of the coordinators reported fewer than 45 stations available and fewer than 25 in use and that fewer than 21% of students were offered employment.

Program Characteristics:
Supervisor Report

Supervisors were asked to supply information relating to six characteristics of the Work Experience program.

The size of the sponsoring firm was expressed in terms of the number of people employed (Table 28). Business and industrial firms with fewer than 20 employees represent the highest proportion of sponsors in the Work Experience program. Eighteen of the sponsors used by the schools claimed in excess of 20 employees and only half of these report more than 40.

Sponsoring firms had been associated with the Work Experience program from one to nine years. Table 29 illustrates

TABLE 28

NUMBER OF PEOPLE EMPLOYED
BY SPONSOR

Employees	Number	Percent
1 to 20	53	72.6
21 to 40	9	12.3
Over 40	9	12.3
No Response	2	2.8

TABLE 29

NUMBER OF YEARS SPONSOR HAS BEEN
ASSOCIATED WITH PROGRAM

Years Associated	Number	Percent[a]
1 to 3	39	53.4
4 to 6	22	30.1
7 to 9	7	9.6
No Response	5	6.8

the data. Slightly more than half of sponsoring organizations had been associated with the Work Experience programs for three years or less, nearly one-third for four to six years and slightly fewer firms had associations for more than seven years. The majority of sponsoring firms had been with the program for six years or less.

Table 30 shows that no more than nine students were

TABLE 30

STUDENTS SPONSORED BY BUSINESS
OR INDUSTRY DURING SEMESTER

Number of Students	Number of Firms	Percent
1	47	64.4
2	13	17.8
3	5	6.8
4	2	2.7
9	1	1.4
No Response	5	6.8

being currently sponsored by any one firm and also shows that most organizations sponsor either one or two students with the majority of these sponsoring only one. Slightly more than one-tenth of sponsors engage three or more students. Nearly seven percent did not answer the question.

The modal number of students sponsored per year was one or two (Table 31). The mean number of students sponsored per year is only marginally higher than the actual number being sponsored. Slightly more than one-quarter of the sponsors in the program sponsored more than two students per year.

More than 16% of supervisors indicated that none of their students would be recommended by the supervisor for employment in his

TABLE 31

NUMBER OF STUDENTS
SPONSORED PER YEAR

Number of Students	Number of Firms	Percent
1 or 2	50	68.6
3 or 4	12	16.4
5 or 6	6	8.2
7 or more	2	2.7
No Response	3	4.1

or her firm (Table 32). Over 80% of the supervisors indicated

TABLE 32

PERCENTAGE OF STUDENTS WHO WOULD BE
RECOMMENDED FOR EMPLOYMENT

Would be Recommended	Supervisors	Percent
0%	12	16.4
1% to 50%	20	27.4
51% to 100%	41	56.2

that they would recommend some of their student workers for employment, whereas slightly more than 56% of the supervisor group indicated that they would recommend half or more of their student workers.

The number of students offered employment was another question (Table 33). Thirty-six supervisors reported that no Work

TABLE 33

PERCENTAGE OF STUDENTS OFFERED EMPLOYMENT

Percent of Students Offered Employment[a]	Supervisors Reporting N	%
0	36	49
5	6	8
25	5	7
42	7	10
70	4	6
99	15	21

[a]The Mode = 0%

Experience student had been offered employment, yet 15 supervisors claimed that nearly all of their Work Experience students had been made an offer of employment. Nearly three-quarters of the supervisor group indicated that fewer than 70% of students had been offered employment with their firm.

Summary of the findings. A perusal of the data revealed that linkages may exist among several program characteristics.

An affiliation seems possible between the number of people employed by a sponsor and the number of students sponsored. Larger firms tend to sponsor more students.

The number of years a firm had been associated with the Work Experience program may be pertinent to the number of students recommended for employment and the number of students offered employment. Smaller organizations tend to sponsor fewer students and tend also to offer fewer students employment.

Last, the percentage of students recommended for employment seems to be relevant to the percentage of people offered employment. Sponsors tend to heed their supervisors' advice.

Sponsoring organizations tend to employ 20 people or fewer and tend also to be associated with the Work Experience program less than four years. Sponsors are most apt to engage only one student at a time, once or twice per year, and supervisors tend to recommend most students for employment. The Work Experience program results in some kind of an employment offer to almost 40% of students.

CHAPTER SUMMARY

This chapter described the study sample and reported the percentage of returns for each of the three questionnaires. In addition it provided a description of the respondent and program characteristics.

The data revealed that female students outnumber male students by a ratio of nearly 2:1 and that the majority of students were 16 or 17 years of age and in grade 12. The greatest proportion of these students was in a non-matriculation program and registered in the senior or combined course. It was discovered

also that nearly one-half of the students in the program were investigating jobs or occupations that required some postsecondary education.

Males tended to be the older students, were in a non-matriculation program and enrolled in the combined Work Experience 25/35 course. This tendency was also evident for other students generally.

The fewest number of coordinators was to be found in the lower and higher age ranges and they were most apt to have done some graduate training. Work Experience coordinators tended to have other teaching responsibilities in the non-matriculation program and tended also to have more than 10 years of teaching experience and fewer than 5 years of experience outside of the profession. The greatest number of coordinators had been associated with the Work Experience program for six years or less.

Males and females were fairly evenly distributed among supervisory respondents. Like the coordinator group, supervisors tended not to be the older or the younger employees in the organization and were most likely in possession of a completed high school education. The majority of supervisors had been associated with the program less than three years and had been employed for fewer than 10 years.

As coordinator age increased so too did his/her association with the Work Experience program. Also, the younger supervisors tended to be better educated.

According to the majority of students, coordinators and

supervisors, the kinds of activities to which students were exposed had some variation in task content.

Student enrollment tends to increase with the number of times the course had been offered. So too, the number of stations used appeared to increase with enrollment.

The greatest number of sponsors represented in the study employed fewer than 20 people and were associated with the Work Experience program for three years or less. Most firms sponsored one student currently and one or two annually. More than half of the students would have been recommended for employment by the supervisor and slightly more than one-fifth of the sponsors offered employment to all of their student workers.

No statistically significant differences were observed between city and non-city samples on the measures used in this section.

Chapter 5 describes and analyzes the data from the Work Experience Opinionnaire on Student Learning Activities.

CHAPTER 5

ANALYSIS OF DATA ON STUDENT LEARNING ACTIVITIES AND PROGRAM OUTCOMES

This chapter presents an analysis of the data gathered by questionnaire from students, coordinators and supervisors involved in the Work Experience Education program in Alberta. The chapter is divided into four parts, the first of which examines the priorities[1] of Work Experience. Part two deals with respondent perceptions of the frequency of attainment of the benefits of Work Experience. Part three presents the responses to the open-ended questions. Part four presents a comparison of priorities and perceived frequency of benefit attainment.

In order to examine the problem of determining the priorities for Work Experience and the frequency with which those benefits were perceived to occur, two research questions were posed:

1.0 What are the priorities for Work Experience as perceived by students, by coordinators and by supervisors?

2.0 What are the benefits of Work Experience being attained as perceived by students, by coordinators and by supervisors?

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[1] A priority is defined as a Work Experience benefit that is important to students, coordinators and/or supervisors.

To provide an orderly examination of the data two learning categories have been used: the cognitive and the affective learning domains (Bloom and others, 1956; Krathwohl and others, 1964). The nature of the benefit statements precluded a rigorous adherence to distinctions made by these writers as many of the statements deal with some aspects of both domains. However, in order to reduce the size of tables, the following general categorizations were adopted based on Krathwohl's (1973:248) definitions:

> The cognitive includes those objectives having to do with thinking, knowing, and problem solving. The affective includes those objectives dealing with attitudes, values, interests and appreciation.

FINDINGS ON PRIORITY OF BENEFITS

All respondent groups rated the anticipated benefits of Work Experience Education as important. However, differences did emerge in the ranking of items and statistically significant differences were evident in the perceived importance of some items.

Affective Priorities

Findings. The findings relative to affective priorities are reported in Table 34. When student, coordinator and supervisor ranks were combined the activities "learn to develop good work habits" and "learn to develop the necessary attitudes for successful job performance" emerged as first and second priority, respectively. Less important activities for students were to "learn the value of employer references" and to "learn the value of

TABLE 34

STUDENT, COORDINATOR AND SUPERVISOR
RATING OF AFFECTIVE BENEFITS

Affective Benefit[a]	Student N = 94		Coordinator N = 24		Supervisor N = 73		Overall Ranking[b]
	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	
1. Students learn to develop the necessary attitudes for successful job performance	4.51	4	4.67	1.5	4.78	1.5	2*
2. Students learn to develop good work habits	4.66	1.5	4.67	1.5	4.78	1.5	1
3. Students learn to develop personality and poise	4.04	8	4.08	7.5	4.35	6	7*
4. Students learn to assume responsibility	4.66	1.5	4.46	3.5	4.71	3	3
5. Students learn to develop an appreciation of the dignity of honest work	4.38	5	4.38	5	4.56	5	5
6. Students learn to get along with fellow workers and employers	4.57	3	4.46	3.5	4.62	4	4
7. Students learn to make the adjustment between school and the world of work	4.23	6	4.13	6	4.34	7	6
8. Students learn the value of employer references	4.18	7	4.08	7.5	4.22	8	8
9. Students learn the value of staying in school for a longer period of time	3.52	9	3.61	9	4.09	9	9*
$\bar{X}$	4.31		4.28		4.47		*

[a] All items were rated on a 5 point scale: categories ranged from 1 = Not important to 5 = Very important.

[b] Lowest sum of the three rankings was awarded the lowest rank.

* Two groups are significantly different at the .10 level on the Multiple Range Test, Scheffe Procedure.

staying in school for a longer period of time" which ranked eighth and ninth overall. Statistically significant differences emerged between student and supervisor samples on learning "to develop the necessary attitudes for successful job performance," learning "to develop personality and poise" and learning "the value of staying in school for a longer period of time." Supervisors rated these items higher than did students.

Students rated learning "to develop good work habits" and learning "to assume responsibility" as the two most important priorities for Work Experience. The least important activity according to this sample was "to learn to develop personality and poise" and "to learn the value of staying in school for a longer period of time."

The coordinator sample rated learning "to develop the necessary attitudes for successful job performance" and "to learn to develop good work habits" as the two most important activities for students on Work Experience in the affective learning category. Learning "to develop personality and poise," learning "the value of employer references," and learning "the value of staying in school for a longer period of time" emerged as the least important benefits to students according to coordinator perceptions.

Supervisors rated learning "to develop the necessary attitudes for successful job performance" and learning "to develop good work habits" as the most important activities for students on Work Experience. It was of lesser importance to supervisors for students "to learn the value of employer references" and "to learn

the value of staying in school for a longer period of time." These items ranked eighth and ninth, respectively.

Clearly, all of the affective benefits identified in this study were important to students, to coordinators and to supervisors. Agreement existed between samples in terms of the most important and the least important affective benefits to students. Statistically significant differences emerged between students and supervisors on the extent of the importance of three items. Supervisors accorded higher priority to all items than did students or coordinators.

Discussion. A possible explanation for these differences could be found in the orientations of the three groups of respondents. Students and coordinators would be more apt to share common attitudes toward learning than would students and supervisors. A factor that was common to students, coordinators and supervisors was school: all have had some exposure to the goals, attitudes, and behaviors that are necessary and desirable in school. This could explain the high scores assigned to the benefits of Work Experience. A factor that is common to coordinators and supervisors is employment: both groups have been exposed to and could have accepted those goals, attitudes and behaviors that are necessary to success and survival in the workplace. This may explain the lack of statistically significant differences between students and coordinators and between coordinators and supervisors. The statistically significant differences between scores assigned by students and supervisors

could be due to the differences in the goals, attitudes and behaviors necessary in school and the work place.

Cognitive Priorities

Findings. The findings relative to cognitive benefits are reported in Table 35. When student, coordinator and supervisor ratings were combined the highest priority overall was "to learn useful skills on real jobs under actual working conditions" followed by learning "skills and knowledge not found in school." The least important cognitive learning activities were "to learn about business and industry" and "to learn the relationship between production and wages." These items ranked eighth and ninth, respectively. No statistically significant differences emerged among scores assigned by students, coordinators and supervisors though there was some tendency for supervisors to score items slightly higher than the other groups.

Students rated learning "useful skills on real jobs under actual working conditions" and learning "from training and experience on equipment not found in school" as first and second priority. The lowest priority ratings were accorded "to learn about business and industry" and "to learn the relationship between production and wages" which ranked eighth and ninth, respectively.

Coordinators agreed with students that learning "useful skills on real jobs under actual working conditions" was the most important learning activity for students. However, the coordinator

TABLE 35

STUDENT, COORDINATOR AND SUPERVISOR
RATING OF COGNITIVE BENEFITS

Cognitive Benefit[a]	Student N = 94		Coordinator N = 24		Supervisor N = 73		Overall Ranking[b]
	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	
10. Students learn useful skills on real jobs under actual working conditions	4.51	1	4.54	1	4.65	1	1
11. Students learn the relationship between production and wages	3.83	9	3.79	9	3.97	9	9
12. Students learn the relation- between education and job success	4.07	6	4.21	4	4.25	4	5
13. Students learn about business and industry	3.88	8	3.96	8	4.06	7	8
14. Students learn about worth-while jobs and careers	4.25	3	4.25	3	4.28	3	3
15. Students learn skills and knowledge not found in school	4.19	4	4.29	2	4.46	2	2
16. Students learn from training and experience on equipment not found in school	4.37	2	4.17	5.5	4.19	5	4
17. Students learn a relationship between academic education and job and career requirements	3.89	7	4.17	5.5	4.18	6	6
18. Students learn the skills and knowledge needed for employment in their own communities	4.17	5	4.04	7	4.05	8	7
$\bar{X}$	4.14		4.16		4.20		

[a] All items were rated on a 5 point scale: categories ranged from 1 = Not important to 5 = Very important.

[b] Lowest sum of the three rankings was awarded the lowest rank.

sample perceived learning "skills and knowledge not found in school" as being second in importance. Coordinators also agreed with students that the least important benefit was for students "to learn the relationship between production and wages." That "students learn about business and industry" ranked eighth.

Supervisors accorded with students and coordinators that the most important cognitive benefit was for students "to learn useful skills on real jobs under actual working conditions." Supervisors agreed with coordinators that learning "skills and knowledge not found in school" was next in importance. "To learn the skills and knowledge needed for employment in their own communities" ranked eighth and "to learn the relationship between production and wages" ranked ninth in importance. The latter rank corresponded to student and coordinator perceptions.

It is clear that the cognitive benefits identified in this study were important to students, to coordinators and to supervisors. Further, the sample groups agreed on the most important and the least important benefits to students in Work Experience.

It is interesting that supervisors rated cognitive benefits higher than did coordinators. With the exception of learning "from training and experience on equipment not found in school" and learning "the skills and knowledge needed for employment in their own communities" supervisors rated cognitive benefits higher than did students or coordinators.

Discussion. Though no statistically significant differences emerged among samples there was a general tendency for

supervisors to rate the items under study slightly higher in importance than did coordinators. Coordinators also rated these items higher than did students. This phenomenon may be due to the students' lack of experience in judging appropriate behavior in the job market place. Perhaps the most important finding is the high level of agreement among these respondent groups in relation to these cognitive benefits.

FINDINGS ON BENEFIT ATTAINMENT

All respondent groups indicated that the anticipated benefits of Work Experience Education occurred on a relatively frequent basis. However, differences did emerge in the ranking of items and statistically significant differences were evident in the perceived frequency of attainment of these benefits for some items.

Affective Benefit Attainment

Findings. The findings related to the attainment of affective benefits are reported in Table 36. When student, coordinator and supervisor ratings were combined the activities learning "to get along with fellow workers and employers" and learning "to develop the necessary attitudes for successful job performance" emerged as the most frequently occurring benefit. The former activity was ranked highest. The two activities with the lowest frequency of occurrence were "to learn the value of employer references" and "to learn the value of staying in school for a longer period of time." These items ranked eighth and ninth overall. Statistically significant differences emerged between students and supervisors for three items: "to learn to develop the

TABLE 36

STUDENT, COORDINATOR AND SUPERVISOR PERCEPTIONS OF THE FREQUENCY OF AFFECTIVE BENEFIT ATTAINMENT

Affective Benefit[a]	Student N = 94		Coordinator N = 24		Supervisor N = 73		Overall Ranking[b]
	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	
1. Students learn to develop the necessary attitudes for successful job performance	4.24	2	4.08	1	3.97	3	2*
2. Students learn to develop good work habits	4.17	4	3.96	3.5	3.87	4	4
3. Students learn to develop personality and poise	3.76	7	3.67	5	3.74	5.5	5.5
4. Students learn to assume responsibility	4.22	3	3.96	3.5	4.02	2	3
5. Students learn to develop an appreciation of the dignity of honest work	4.07	6	3.46	8	3.65	7	7*
6. Students learn to get along with fellow workers and employers	4.53	1	4.04	2	4.17	1	1*
7. Students learn to make the adjustment between school and the world of work	4.16	5	3.50	7	3.74	5.5	5.5*
8. Students learn the value of employer references	3.64	8	3.63	6	3.42	8	8
9. Students learn the value of staying in school for a longer period of time	3.01	9	3.09	9	3.32	9	9
$\bar{X}$	3.98		3.71		3.76		*

[a] All items were rated on a 5 point scale: categories ranged from 1 = Never happened to 5 = Often happened.

[b] Lowest sum of the three rankings was awarded the lowest rank.

* Two groups are significantly different at the .10 level on the Multiple Range Test, Scheffe Procedure.

necessary attitudes for successful job performance," "to learn to develop an appreciation of the dignity of honest work," and "to learn to get along with fellow workers and employers." Students rated all items higher than did supervisors. A statistically significant difference emerged between students and coordinators on one item: "to learn to make the adjustment between school and the world of work." Students assigned a higher frequency rating to this item than did coordinators. With the noted exceptions, there was general concurrence among groups on all other items.

Students awarded the highest frequency rating to learning "to get along with fellow workers and employers" followed by learning "to develop the necessary attitudes for successful job performance." Learning "the value of staying in school for a longer period of time" ranked ninth, whereas learning "the value of employer references" ranked eighth.

The coordinator sample perceived learning "to develop the necessary attitudes for successful job performance" as the most frequently occurring activity followed closely by learning "to get along with fellow workers and employers." Coordinators concur with students that the least frequent occurrence is learning "the value of staying in school for a longer period of time." The coordinator sample reported that learning "to develop an appreciation of the dignity of honest work" was the second least occurring activity of Work Experience.

Supervisors and students agreed that "to learn to get along with fellow workers and employers" happened most often.

The supervisor sample perceived a fairly high incidence of students learning "to assume responsibility" and this item ranked second. Learning "the value of employer references" and "the value of staying in school for a longer period of time" ranked eighth and ninth, respectively. Students and supervisors were in accord on the former item, whereas all three groups concurred on the latter item.

It seems clear that the learning activities examined in this study occurred on a relatively frequent basis as perceived by students, by coordinators and by supervisors. Further, there appeared to be accord in what occurred most and what occurred least frequently. Generally, students perceived a greater frequency of learning activity than did coordinators, the exception being "to learn the value of staying in school for a longer period of time." Though the differences were not statistically significant, coordinators perceived a greater frequency occurring for students "to learn the value of employer references," "to learn to develop good work habits" and "to learn to develop the necessary attitudes for successful job performance" than did supervisors. With the exception of learning "the value of staying in school for a longer period of time," students perceived a higher frequency of occurrence of all activities than did supervisors.

Discussion. The difference in frequency scores assigned by students, coordinators and supervisors may have been due to the extent of familiarity with the work environment. It is possible that students, being in a relatively new environment,

would be more sensitive to changes in their own development than would coordinators or supervisors. Hence, the higher scores could be interpreted as reflecting real change. It is also possible that coordinators and supervisors, being more mature and perceptive than students, were more sensitive to real change in student behavior, hence, their lower scores. While these assertions seem reasonable, no concrete evidence exists to support them. Clearly, this area is in need of further research.

Cognitive Benefit Attainment

Findings. The findings related to attainment of cognitive benefits are reported in Table 37. The activities learning "useful skills on real jobs under actual working conditions" and learning "skills and knowledge not found in school" emerged as the first and second most frequently attained benefits, respectively, when all group were combined. The three least frequently attained benefits were learning "the relationship between production and wages," "the relationship between education and jobs success" and "to learn about business and industry," the first of which ranked ninth, whereas the latter two items were tied. One statistically significant difference emerged between students and supervisors on learning "a relationship between academic education and job and career requirements." Students perceived a lesser frequency of this relationship than did supervisors.

Students rated learning "skills and knowledge not found in school" and learning "useful skills on real jobs under actual working conditions" as the first and second benefits most frequently

TABLE 37

STUDENT, COORDINATOR AND SUPERVISOR PERCEPTIONS OF THE FREQUENCY OF COGNITIVE BENEFIT ATTAINMENT

Cognitive Benefit[a]	Student N = 94		Coordinator N = 24		Supervisor N = 73		Overall Ranking[b]
	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	
10. Students learn useful skills on real jobs under actual working conditions	4.09	2	4.29	1	4.29	1.5	1
11. Students learn the relationship between production and wages	3.00	9	2.79	9	2.79	9	9
12. Students learn the relationship between education and job success	3.53	7	3.08	8	3.50	7	7.5
13. Students learn about business and industry	3.44	8	3.50	6	3.24	8	7.5
14. Students learn about worthwhile jobs and careers	3.73	5	3.71	4	3.57	6	5
15. Students learn skills and knowledge not found in school	4.25	1	3.96	3	4.29	1.5	2
16. Students learn from training and experience on equipment not found in school	3.90	3	4.08	2	3.99	3	3
17. Students learn a relationship between academic education and job and career requirements	3.54	6	3.26	7	3.79	4	6*
18. Students learn the skills and knowledge needed for employment in their own communities	3.86	4	3.61	5	3.71	5	4
$\bar{X}$	3.69		3.59		3.67		

[a] All items were rated on a 5 point scale: categories ranged from 1 = Never happened to 5 = Often happened.

[b] Lowest sum of the three rankings was awarded the lowest rank.

* Two groups are significantly different at the .10 level on the Multiple Range Test, Scheffe Procedure.

attained. The lowest frequency ratings were assigned to learning "about business and industry" and learning "the relationship between production and wages" which ranked eighth and ninth, respectively.

Coordinators rated the activities "to learn useful skills on real jobs under actual working conditions" as having the highest frequency of occurrence and "to learn from training and experience on equipment not found in school" which was second in attainment frequency. The least frequently attained benefits, ranked eighth and ninth, were learning "the relationship between education and job success" and learning "the relationship between production and wages."

Supervisors and coordinators were in accord in rating learning "useful skills on real jobs under actual working conditions" as the most frequently occurring benefit to be attained. In addition, the supervisor group also assigned the same score to learning "skills and knowledge not found in school." Both items were tied. Supervisors rated learning "the relationship between production and wages" as the least frequently occurring benefit. Learning "about business and industry" rated only slightly higher and ranked eighth.

Clearly, cognitive learning activities occur on a moderately frequent basis as perceived by students, by coordinators and by supervisors. Further, there seems to be agreement in what occurred most and what occurred least frequently. Students, coordinators and supervisors agreed that learning "useful skills

on real jobs under actual working conditions" happened quite often whereas "to learn the relationship between production and wages," occurred the least often.

Discussion. The very small difference among groups in frequency scores may be due to the relatively easier task of identifying and measuring cognitive as opposed to affective behavior: judgements would tend to be less subjective. This explanation could also account for the overall similarity among groups in terms of individual item rating and the absence of statistically significant differences among samples.

SUMMARY OF PRIORITIES AND BENEFIT ATTAINMENT FREQUENCY

One of the objectives of this research effort was to determine the extent to which students, coordinators and supervisors agreed on the importance of the benefits of Work Experience Education. Significant differences existed between student and supervisor with respect to three affective learning activities. No significant differences were found with respect to the cognitive learning category.

Even though differences did exist among groups on the extent of importance of some items, the overall rating of the anticipated benefits of Work Experience indicated that those benefits were important to students, to coordinators and to supervisors.

Another objective of this study was to determine the extent of agreement among students, coordinators and job supervisors on the frequency of attainment of the anticipated benefits of Work Experience Education. A few significant differences were identified among groups on the frequency of benefit attainment and it was found that the differences emerged between students and supervisors for the most part and between students and coordinators to a lesser extent.

Even though statistically significant differences were found among groups on some measures, there was great similarity among them and the overall rating by the respondent groups indicated a moderately frequent rate of benefit attainment.

RESPONSES TO THE OPEN-ENDED QUESTION

In order to provide respondents with the opportunity to make comments and to supply some ex-post validation for the study, an open-ended question was asked. Students, coordinators and supervisors were requested to state both positive and negative factors associated with the Work Experience program. Sorting of the responses revealed five positive and nine negative comment categories from students; however, 48 students made no comment. Twenty-one coordinators did not respond to the open-ended question; however, five positive and six negative response categories did emerge. Of the 67 supervisors questioned, 42 did not respond, but this group did provide 9 positive and 8 negative types of comments.

Student Responses to the Open-Ended Question

Students made a total of 77 positive comments. Some of the responses emerging from the open-ended question serve to support the findings in the previous part of this thesis; other comments tend to extend the list of what students perceive to be important (Table 38). Interpersonal relations were exemplified by

TABLE 38

STUDENT PERCEPTIONS OF POSITIVE FACTORS ASSOCIATED WITH WORK EXPERIENCE

Comment	Frequency
Interpersonal relations	24
On-the-job training	15
Prepares for school leaving	28
Increases learning	7
Learn to accept responsibility	3
Total	77

comments such as "friendly supervisor," "meeting new people" and "working with the public." These activities could be subsumed under the Affective item "learning to get along with fellow workers and employers," the third highest ranked benefit.

The on-the-job training category contained comments such as "on-the-job training" and "learning practical skills"; a cognitive benefit which was rated first by students. Comments on

preparation for school leaving were typified by "helps you get a job," "presents employment opportunities," "allows career exploration" and "prepares you for leaving school." "Learning about worthwhile jobs and careers" was rated third by students.

Discussion. The category "increases learning" could be subsumed under any of the benefits of Work Experience. Learning "to assume responsibility" was ranked first under affective benefits and the finding in the open-ended question supports this ranking.

A total of 41 negative comments were offered by students (Table 39). The most frequently mentioned comments referred to

TABLE 39

STUDENT PERCEPTIONS OF NEGATIVE FACTORS ASSOCIATED WITH WORK EXPERIENCE

Comment	Frequency
Not enough time on the job	12
Lack of variety	9
Supervisor does not explain	4
Transportation problems	4
Not enough stations	3
Not enough/no pay	3
Too much time on job	2
Cheap labor	2
Other	2
Total	41

the amount of time spent on Work Experience per day and most students were concerned that one or one and one-half hours per day was much too short. "Lack of variety" was cited as the second negative factor associated with the program. The lack of "supervisor direction" and problems with "transportation" emerged as the third highest concerns of students. Too "few work stations" and "too little remuneration" were cited as other concerns by students. To a lesser extent students expressed dissatisfaction with aspects of time on the job, use of student labor and the status of Work Experience Education.

It is possible that the first four items listed in Table 39 are associated. Some schools have scheduled Work Experience for 80 minutes per day. Assuming that it may take a student 20 minutes to travel to the work site and to return to school (10 minutes each way), 60 minutes would be left to attend work if the work site was close to school. Supervisors may not always be able to give immediate attention to the student employee which may cost the student another 5, 10 or 15 minutes. The net result could be that the student could spend as little as 45 minutes in actual work. In the interests of having the student perform some kind of activity it seems reasonable to expect that the supervisor would be apt to assign the student to simple, repetitive tasks that required little explanation.

Coordinator Responses to the Open-Ended Question

There was a total of 20 comments made by coordinators, some of which tended to support the evidence presented in Tables

34, 35, 36 and 37 while other comments extended the list of benefits perceived by coordinators to be important. Comment categories are illustrated in Table 40. "Job related attitudes"

TABLE 40

COORDINATOR PERCEPTIONS OF POSITIVE FACTORS ASSOCIATED WITH WORK EXPERIENCE

Comment	Frequency
Students learn job related attitudes	7
Increases student responsibility	5
Enhances school-community relations	3
Makes theory concrete	2
Other	3
Total	20

were reported to be the most important to students as perceived by coordinators. That students learn to assume "responsibility" was ranked third by this group in importance and fourth in overall frequency of benefit attainment. The emergence of the importance of "school-community relations" is an anticipated benefit of Work Experience that was not addressed in this study. "Making theory concrete" could not be subsumed under any of the learning categories used in this study and emerged as an important consideration for future studies. There were three comments made in the "Other" category which referred to "job creation," "student timetabling" and "easy high school credits."

Coordinators provided a total of 21 negative comments (Table 41) in 6 categories. The coordinator group cited "poor

TABLE 41

COORDINATOR PERCEPTION OF NEGATIVE FACTORS ASSOCIATED WITH WORK EXPERIENCE

Comment	Frequency
Difficult to evaluate student	3
Easy credits	3
Transportation problems	2
Lack of stations	2
Employer abuse	2
Other	9
Total	21

evaluation criteria and the "ease of obtaining credits" for high school as the negative factors most frequently cited. "Transportation problems," "lack of stations" and "employer abuse" were mentioned as other problem areas in Work Experience. The "Other" category contained nine discrete statements ranging from "lack of classroom time" and "inconsistent pay for students" to "not enough supervision time."

Discussion. One cannot be expected to know all there is to know about business and industry and it is possible that coordinators' lack of familiarity with the technology of many

businesses may be responsible for the apparent lack of evaluation criteria.

Supervisor Responses to the Open-Ended Question

Supervisors offered 41 positive comments in 9 categories (Table 42). "The school-business relationship" emerged as the

TABLE 42

SUPERVISOR PERCEPTIONS OF POSITIVE FACTORS ASSOCIATED WITH WORK EXPERIENCE

Comment	Frequency
Enhances the school-business relationship	9
Student can choose a career	6
Creates a pool of trained workers	6
Students learn responsibility	5
Prepares students for school leaving	4
Opportunity to experience employer-employee relations	3
Opportunities for personal development	3
Learn new priorities/skills	2
Other	3
Total	41

most frequently mentioned positive aspect of the program. This comment was similar to coordinator comments regarding the

"school-community relationship," a benefit not investigated in this study. The second most frequently mentioned categories related to "student career choice" and "creation of a pool of trained manpower." To "learn about worthwhile jobs and careers" was ranked third in importance (Table 35) by all three groups and fifth (Table 37) for frequency of attainment. The creation of a "trained pool of manpower" was another benefit not investigated in this research. That students "learn to assume responsibility" was given a very high importance rating by all groups and also a high frequency of attainment rating; the comments tended to support the rating of priorities. The "preparation of students for school leaving" was mentioned four times and was rated sixth in importance (Table 34) and fifth in attainment frequency (Table 36) by all groups. The "opportunity to experience employer-employee relations," to "develop personal qualities" and "to learn new skills and priorities" seemed to be related "to learning about business and industry," although "personal quality development" could have been subsumed under "learning to develop personality and poise." However, neither of the latter benefit categories was rated in the top five in importance or in terms of frequency benefit attainment. "Other" factors included "getting kids out of school."

A total of 21 negative comments in 8 categories were made by supervisors (Table 43). The most frequent criticism by supervisors conforms to the perceptions of students regarding "too short a work period." Supervisors also reported that there was

TABLE 43

SUPERVISOR PERCEPTIONS OF NEGATIVE FACTORS ASSOCIATED WITH WORK EXPERIENCE

Comment	Frequency
Too short a work period	5
No need for students to be productive	5
Not enough time for students	4
Students disrupt work flow	3
Students not prepared	3
Coordinator controls marks	1
Total	21

"no need for students to be productive." The "lack of time for students" and "too few coordinator visits" were mentioned four times each. Three comments each about "students disrupting the work flow" and "students not being prepared" were made by supervisors. Three other comments regarded the "lack of direction from school" and the "control of marks by the coordinator."

Discussion. The length of the work period may have been directly related to the coordinators' problems in evaluating student progress. A review of the list of comments strongly suggests that the short work period may have been related to the lack of student productivity, lack of time for student counselling/direction, lack of coordinator visits, student disruption of the work flow and the lack of student preparation for job site activities. Treating

Work Experience Education as another period to be conveniently scheduled (1-1½ hours per day) could be responsible for the lack of direction from the school and the control of marks by the coordinator if viewed in light of the coordinator difficulties in evaluating students (lack of criteria). These assertions are in need of further research, clearly.

SUMMARY OF THE OPEN-ENDED RESPONSES

Students emphasized "interpersonal relations" as the most frequently mentioned positive factor associated with the program and "lack of time on the job" as the most frequently mentioned negative factor. Coordinators perceived "learning job related attitudes" as the most positive and the "difficulty in establishing evaluative criteria" as the most negative feature of the Work Experience program. Supervisors stated most frequently that the "enhancement of the school-business relation" was a positive aspect of the program, whereas the "short work period" emerged as the most frequently cited negative aspect.

COMPARISON OF PRIORITIES AND ATTAINMENT FREQUENCY WITH THE OPEN-ENDED RESPONSES

Even though significant differences did exist among groups on the extent of importance of some items, the overall rating of the anticipated benefits of Work Experience Education indicated that substantially the same benefits were important to students, to coordinators and to supervisors. Affective benefits were rated slightly higher than cognitive benefits on the overall measure by all

groups. Analysis of variance revealed statistically significant differences among groups for three items assessing affective benefits and for the mean of all "affective items" between students and supervisors. No statistically significant differences existed among groups for any of the measures of importance associated with the cognitive benefits.

No statistically significant differences emerged on four items of affective benefit attainment. However, analysis of variance revealed differences between students and coordinators on three items and between students and supervisors on five items and the mean of all affective items. No statistically significant differences emerged between ratings assigned by coordinators and supervisors. There was no significant difference among ratings assigned to cognitive benefits by students, coordinators and supervisors except in one instance. The item on which a difference did exist revealed a disagreement between students and supervisors. The overall means of the ratings of the respondent groups indicates a moderate to high degree of benefit attainment frequency.

When importance and frequency of attainment ranks were compared, item 2, learning "to develop good work habits", emerged as most important (Table 44) and among the most frequently attained benefits as perceived by all groups. Students, coordinators and supervisors also agreed on the five most important benefits (items 1, 2, 4, 6 and 10) and generally these benefits were perceived to be most frequently attained. The evidence supports

TABLE 44

RANKINGS OF THE BENEFITS OF WORK EXPERIENCE
ACCORDING TO IMPORTANCE AND FREQUENCY

	Item[a]	Students N = 94 Importance		Students N = 94 Frequency		Coordinators N = 24 Importance		Coordinators N = 24 Frequency		Supervisors N = 73 Importance		Supervisors N = 73 Frequency	
Affective Learning	1	4.5[b]	(4.5)[c]	3[b]	(2)[c]	1.5[b]	(1.5)[c]	2.5[b]	(1)[c]	1.5[b]	(1.5)[c]	6[b]	(3)[c]
	2	1.5	(1.5)	6	(4)	1.5	(1.5)	4.5	(3.5)	1.5	(1.5)		
	3	14	(8)	11	(7)	13.5	(7.5)	9	(5)	3	(6)	9	(5.5)
	4	1.5	(1.5)	4	(3)	4.5	(3.5)	4.5	(3.5)	3	(3)	4	(2)
	5	6	(5)	8	(6)	6	(5)	4	(8)	6	(5)	12	(7)
	6	3	(3)	1	(1)	4.5	(3.5)	3	(2)	5	(4)	3	(1)
	7	9	(6)	6	(5)	12	(6)	12.5	(7)	9	(7)	9.5	(5.5)
	8	11	(7)	13	(8)	13.5	(7.5)	10	(6)	12	(8)	15	(8)
	9	18	(9)	17	(9)	18	(9)	16	(9)	15	(9)	16	(9)
Cognitive Learning	10	4.5	(1)	7	(2)	8	(1)	1	(1)	4	(1)	1.5	(1.5)
	11	17	(9)	18	(9)	17	(9)	18	(9)	18	(9)	18	(9)
	12	13	(6)	15	(7)	9	(4)	17	(8)	11	(4)	14	(7)
	13	16	(8)	16	(8)	16	(8)	12.5	(6)	16	(7)	17	(8)
	14	8	(3)	12	(5)	8	(3)	8	(4)	10	(3)	13	(6)
	15	10	(4)	2	(1)	7	(2)	4.5	(3)	7	(2)	1.5	(1.5)
	16	7	(2)	9	(3)	10.5	(5.5)	2.5	(2)	13	(5)	5	(3)
	17	15	(7)	14	(6)	10.5	(5.5)	15	(7)	14	(6)	8	(4)
	18	12	(5)	10	(4)	15	(7)	11	(5)	17	(8)	11	(5)

[a] Items are in the same order as in previous tables.

[b] All items are reported for overall rating of all cognitive and affective benefits.

[c] Items are reported for rating in cognitive or affective benefit category.

the contention that the Work Experience Education program is most effective in providing students with affective learning activities.

The open-ended question provided additional supporting data for the assertions stated above. Students most frequently mentioned interpersonal (affective) relations as a positive factor associated with the program. Evidence was found to further corroborate specific affective learning priorities. Coordinators most frequently cited job related learning activities as an important factor, whereas supervisors most frequently considered the school-business relationship to be important.

Information from both the statistical analysis of the fixed response and the open-ended items was in agreement. The findings indicate:

1. The program was reasonably effective in providing students with important learning activities.

2. There existed reasonable agreement among groups on the importance of the benefits and the frequency with which the benefits were attained.

3. Students, coordinators and supervisors agreed on the most important benefits: "to develop good work habits," and "to learn useful skills."

4. The most important benefits were also among the most frequently attained benefits.

5. Ex-post validity was established through responses to the open-ended question.

SUMMARY

This chapter dealt with the relationship between Work Experience benefits and the frequency of attainment of those benefits.

There seems to be little point in discussing the frequency of attainment of anticipated benefits without discussing also the importance of those benefits to students as perceived by the participants in the program. Worthen and Sanders (1973:105) argue, ". . . that even though program objectives are all met, the program cannot be judged as valuable if the objectives are not worthwhile."

Clearly, congruence between the anticipated benefits of Work Experience and attainment of benefits, may exist only in theory because of differences in perception. Many factors influence the attainment of Work Experience objectives not the least of which are the location of the school, the types of businesses that are willing to participate in the program, the type of business to which the student is exposed and the commitment of the coordinator and the supervisor to the program. However, a basic assumption was that the anticipated benefits should be achieved on a relatively frequent basis. Within the limits stated above, such an assumption did not seem unreasonable.

The evidence supports the contention that the Work Experience program in the Province of Alberta is moderately to highly effective in delivering important benefits to students. It was found that affective learning activities were perceived to be more important to students, coordinators and supervisors than were

the cognitive learning activities. The most important affective benefit was "to learn to develop good work habits" whereas the most frequently attained affective benefit was "to learn to get along with fellow workers and employers." Learning "useful skills on real jobs under real working conditions" emerged as the most important and the most frequently attained cognitive benefit.

When all benefits were combined and ranked the most important benefit overall was learning "to develop good work habits." The least important benefit, according to students and coordinators, was learning "the value of staying in school for a longer period of time." Supervisor rating indicated that "to learn the relationship between production and wages" was least important.

Overall, the most frequently mentioned benefit by students was "learning to get along with fellow workers and employers"; and by coordinators was, "learning useful skills on real jobs under actual working conditions." Supervisors agreed with coordinators about the importance of learning "useful skills." They also rated learning "skills and knowledge not found in school" as equally important.

The least frequently attained benefit according to the three respondent groups was "to learn the relationship between production and wages."

No statistically significant differences were observed between city and non-city samples on the measures used in this section.

Chapter 6 provides a description and analysis of the data emerging from the School-Sponsor relations Questionnaire.

CHAPTER 6

ANALYSIS OF DATA FROM THE SCHOOL-SPONSOR RELATIONS QUESTIONNAIRE

The purpose of this chapter is to provide an examination of the interorganizational linkages associated with Work Experience as perceived by the students, coordinators and supervisors involved in the Work Experience Education program in Alberta's secondary schools. The chapter is divided into five parts the first of which is an analysis of the extent of formalization of the linkages which exist between schools and sponsors. Part two examines the intensity of the relationship. The third part deals with the extent of reciprocity between cooperating organizations. Part four provides an examination of the extent of program integration between school and sponsor. This chapter concludes with an examination of responses to the open-ended question on the linkages in the Work Experience programs.

The exploratory nature of this study precluded the generation of hypotheses and in order to examine the research problems posed in Chapter 1 answers to the following questions were sought.

1.1 Formalization

1.1 Are the official sanctions[1] for the continuance of the Work Experience program formalized?

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[1] Approved agreement on the responsibilities of the school, sponsor, student, coordinator and supervisor.

1.2 Are Work Experience coordination activities formalized?

1.3 Are Work Experience program liaison activities clearly delineated?

2.0 Intensity

2.1 What is the frequency of interactions between the school and the sponsor?

2.2 What is the extent of resource commitment between the school and the sponsor?

3.0 Reciprocity

3.1 Are resources exchanged between school and sponsor?

3.2 Are the terms of the exchange mutually agreeable to the school and sponsor?

4.0 Program integration

4.1 Does the school contribute to program integration?

4.2 Does the sponsor contribute to program integration?

FORMALIZATION OF THE RELATIONSHIP

Students responded to two questions on the formalization of the linkage between schools and sponsors. Coordinators and supervisors were requested to answer 12 questions on this formalization linkage dimension.

The extent of linkage formalization in relation to the

TABLE 45

OFFICIAL SANCTIONS FOR THE CONTINUANCE OF WORK EXPERIENCE EDUCATION

Item[a]	Student Mean N = 94	Coordinator Mean N = 24	Supervisor Mean N = 73	Significant Difference
Other than the standard Work Experience agreement between student, parent, school board and sponsor how would you describe the agreement that exists between the school and the sponsor?	-[b]	3.44	2.78	*
How completely are the responsibilities of the Work Experience coordinator specified?	-[b]	3.30	2.85	NSD
How completely are the responsibilities of the Work Experience job supervisor specified?	-[b]	2.74	2.99	NSD
How completely are the responsibilities of the Work Experience student specified?	3.23[c]	3.52	3.10	NSD
$\bar{X}$		3.25	2.99	NSD

[a]All items were rated on a 5 point scale. Response categories were 1 = vague, unavailable or non-existent, 2 = generally understood, 3 = poorly written, 4 = clearly written and 5 = very clearly written. It is assumed that there are equal intervals between all response categories.

[b]Students were not asked to rate these items.

[c]Student scores are included in this table for the convenience of the researcher. No comparisons were made between the students and other groups.

*Significant at the .05 level.

official sanction for the continuance of Work Experience Education is reported in Table 45. No significant difference was found between scores assigned by coordinators and supervisors on the global measure[1] of official sanctions. Coordinators and supervisors did differ significantly, however, on the extent of the specificity of the agreement between school and sponsor with respect to sanctions outside the usual parent, school, sponsor, student agreement. In general, supervisors perceived the nature of the agreement to be understood whereas the coordinator group indicated the existence of some written material.

The second formalization indicator was the extent of formalization of coordination activities. The data analysis related to this variable is contained in Table 46. No significant difference between ratings by coordinators and supervisors emerged on the global measure. There was one area in which the coordinator and the supervisor groups did differ: "the degree of specificity for reporting between school and sponsor." The coordinator group perceived the extent of formalization to be somewhat higher than did supervisors though one could surmise, on the basis of mean scores for those two groups, that both groups felt the coordinating methods were not clearly written.

The last formalization variable to be examined was the extent of program liaison activity delineation (Table 47). It seems clear that liaison activities between school and sponsor were

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[1]The global measure is the mean of the scores assigned to each linkage indicator.

TABLE 46

FORMALIZATION OF COORDINATION ACTIVITIES IN WORK EXPERIENCE EDUCATION

Item[a]	Student Mean N = 94	Coordinator Mean N = 24	Supervisor Mean N = 73	Significant Difference
How completely are the methods for Work Experience program reporting between between school and sponsor specified?	-[b]	3.61	3.07	*
How completely are the coordinators' methods for reporting on the Work Experience program specified?	-[b]	3.30	2.93	NSD
How completely are the supervisor's methods for reporting on the Work Experience program specified?	-[b]	3.44	3.24	NSD
How completely are the students' methods for reporting on the Work Experience program specified?	3.63	3.35	3.02	NSD
$\bar{X}$		3.42	3.07	NSD

[a]All items were rated on a 5 point scale. Response categories were 1 = vague, unavailable or nonexistent, 2 = generally understood, 3 = poorly written, 4 = clearly written, and 5 = very clearly written. It is assumed that there are equal intervals between all response categories.

[b]Students were not asked to rate these items.

[c]Student scores are included in this table for convenience. No comparisons were made between student and other group scores.

*Significant at the .05 level.

TABLE 47

FORMALIZATION OF LIAISON ACTIVITIES
IN WORK EXPERIENCE EDUCATION

Item[a]	Student Mean N = 94	Coordinator Mean N = 24	Supervisor Mean N = 73	Significant Difference
When changes are made in routines or procedures in the school how is the job supervisor usually notified?		2.35	2.35	NSD
When changes are made in routines or procedures on the job site how is the school coordinator usually notified?		1.96	2.01	NSD
In aiding the Work Experience program to keep up-to-date with the latest developments in business and industry how is the school coordinator usually notified?		2.35	2.12	NSD
In aiding the Work Experience program to keep up-to-date with the latest developments in the school how is the job supervisor usually notified?		2.17	2.30	NSD
$\bar{X}$		2.21	2.20	NSD

[a]All items were rated on a 5 point scale. Response categories were 1 = not reported, 2 = verbally reported, 3 = memo with verbal explanation, 4 = memo with written short explanation, 5 = memo with written extensive explanation. It is assumed that there are equal intervals between all response categories.

informal: where reports were made, they were of a verbal nature. No significant differences emerged on any measure of liaison activities.

Summary of the Findings

No statistically significant difference emerged on the global measure of formalization between coordinators and supervisors. No significant differences existed on the overall measure of official sanctions for the continuance of Work Experience, and for the extent of formalization of coordination of liaison activities. Differences did occur with respect to individual items: the type of agreement between school and sponsor outside the standard agreement and the extent of specification for program reporting. Coordinators consistently perceived a greater degree of formalization between school and sponsor than did supervisors for most of the indicators used in this study.

INTENSITY OF THE RELATIONSHIP

Students were requested to respond to two items on intensity. Coordinators and supervisors were requested to answer eight questions on the intensity linkage dimension.

The frequency of interaction between school and sponsor, one measure of intensity, is reported in Table 48. Significant differences emerged on three specific measures and on the global measure of frequency of interaction between school and sponsor. In each case the coordinator group perceived a higher rate of interaction than did supervisors. Interaction between coordinator and supervisor occurred more frequently than between coordinator

TABLE 48

FREQUENCY OF INTERACTION BETWEEN SCHOOL AND SPONSOR

Item[a]	Student Mean N = 94	Coordinator Mean N = 24	Supervisor Mean N = 73	Significant Difference
Does the Work Experience coordinator visit the job site?	2.52	3.51	2.96	*
Does the job supervisor visit the school?	-b	1.57	1.76	NSD
Do the Work Experience coordinator and the job supervisor communicate about student progress?	-b	3.91	3.31	**
Do the Work Experience coordinator and the job supervisor exchange ideas on program related problems related to the work site?	-b	3.35	2.50	**
Does the job supervisor help you with the jobs he/she has assigned you to do?	3.44	-c	-c	NSD
$\bar{X}$	(2.98)	3.11	2.63	**

[a]All items were rated on a 5 point scale. Response catories were 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = frequently. It is assumed that there are equal intervals between all response categories.

[b]Students were not asked to rate these items.

[c]Coordinators and supervisors were not asked to rate these items.

*Significant at the .05 level.

**Significant at the .005 level.

and student. Coordinators perceived a higher frequency of interaction for student progress than did supervisors: coordinators reported communication to occur fairly often, whereas supervisors perceived communication to happen on a less frequent basis. The last item examined was the frequency with which ideas on program related problems were exchanged. Again, coordinators perceived a greater amount of interaction on this item than did supervisors. A large discrepancy also existed on the global measure.

The second intensity indicator used in this study was the resource commitment of the school and of the sponsor. Significant differences emerged on two specific items and on the global measure (Table 49). Resource commitment was relatively low particularly for increases in equipment and staff. Supervisors perceived slightly more time allowed for supervision and instruction than did coordinators. Coordinators perceived the effort needed to keep the program going to be considerable; supervisors reported that this task required only limited effort.

Summary of the Findings

When all indicators of intensity were combined no significant difference could be detected between scores assigned by coordinators and supervisors; however, intensity was generally scored low by both groups ($\bar{X}$ = 2.6 and 2.5, respectively). Significant differences did exist on the frequency of interaction between school and sponsor on the global measure and specifically for coordinator visits to the job site, coordinator/

TABLE 49

RESOURCE COMMITMENT OF SCHOOL AND SPONSOR

Item[a]	Coordinator Mean N = 24	Supervisor Mean N = 73	Significant Difference
Since your organization became involved in Work Experience what amount of equipment was purchased primarily for Work Experience?[b]	1.50	1.29	NSD
Since your organization became involved in Work Experience how many staff were engaged primarily for Work Experience?[c]	1.36	1.26	NSD
How much time is allowed to you for student supervision and instruction?[d]	3.09	3.64	*
How much effort is needed from you to keep the program going?[e]	2.39	3.28	**
$\bar{X}$	2.11	2.37	*

[a]All items were scored on a 5 point scale.

[b]Response categories were 1 = no purchase made, 2 = considered students in purchases, 3 = limited purchases made, 4 = purchases increased in variety, and 5 = purchases increased number and variety.

[c]Response categories were 1 = no staff increase, 2 = considered students in staffing, 3 = limited staff increase, 4 = increased varity of staff, 5 = increased number and variety of staff.

[d]Response categories were 1 = no time allowed, 2 = very limited time allowed, 3 = limited time allowed, 4 = adequate time allowed, 5 = as much time as is required.

[e]Response categories were 1 = too much effort, 2 = considerable effort, 3 = limited effort, 4 = very limited effort and 5 = no effort.

*Significant at the .05 level.

**Significant at the .005 level.

Note: It is assumed that there are equal intervals between all response categories.

supervisor communication about student progress and the exchange of ideas on program related problems. Differences between coordinators and supervisors also occurred on the amount of time allowed for student supervision and instruction and the amount of effort needed to maintain the program.

RECIPROCITY OF THE RELATIONSHIP

Coordinators and supervisors were requested to respond to eight questions on reciprocity: four questions each on resource exchange and exchange agreement. The summary of the responses is found in Tables 50 and 51.

Resource exchange between school and sponsor is very low in regard to personnel and equipment (Table 50). Though the extent of sharing information and ideas was rated higher than personnel or equipment items, differences did occur between coordinators and supervisors on the extent of information exchange. Coordinators reported a generally lower exchange rate than did supervisors.

With regard to the global measure of exchange agreement, no statistically significant difference emerged on this measure though differences did occur on two specific items (Table 51). The greatest difference in scores was in response to the sharing or exchange of information on student progress/ behavior. Coordinators rated this item "good", whereas supervisors rated it only "fair." The sharing or exchange of ideas for final student evaluation also exhibited a significant

TABLE 50

RESOURCE EXCHANGE BETWEEN SCHOOL AND SPONSOR

Item[a]	Coordinator Mean N = 24	Supervisor Mean N = 73	Significant Difference
Do the school and the sponsor share or exchange personnel for Work Experience?	1.17	1.30	NSD
Do the school and the sponsor share or exchange equipment for Work Experience?	1.13	1.04	NSD
Do the school and the sponsor share or exchange information on student progress/behavior in Work Experience?	4.09	3.61	*
Do the school and the sponsor share or exchange ideas for final student evaluation on Work Experience?	4.26	3.44	**
$\bar{X}$	2.66	2.34	**

[a]All items were rated on a 5 point scale. Response categories were 1 = no exchange or sharing, 2 = very limited exchange or sharing, 3 = limited exchange or sharing, 4 = exchange or sharing as needed, 5 = regular exchange or sharing.

*Significant at the .05 level.

**Significant at the .005 level.

TABLE 51

RESOURCE EXCHANGE AGREEMENT
BETWEEN SCHOOL AND SPONSOR

Item [a]	Coordinator Mean N = 24	Supervisor Mean N = 73	Significant Difference
Do you agree with the existing arrangement on the sharing or exchange of personnel for Work Experience?	3.32	3.38	NSD
Do you agree with the existing arrangement on the sharing or exchange of equipment for Work Experience?	3.00	2.61	NSD
Do you agree with the existing arrangement on the sharing or exchange of information on student progress/behavior in Work Experience?	4.22	3.59	**
Do you agree with the existing arrangement on the sharing or exchange of ideas for final student evaluation?	4.13	3.68	*
$\bar{X}$	3.71	3.33	NSD

[a]All items were rated on a 5 point scale. Response categories were 1 = no agreement, 2 = little agreement, 3 = fair agreement, 4 = good agreement, 5 = very good agreement.

*Significant at the .05 level.

**Significant at the .005 level.

difference in assigned scores: supervisors rated agreement "fair", whereas coordinators rated it "good."

Summary of the Findings

When all indicators of reciprocity were combined no significant difference could be detected between scores assigned by coordinators ($\bar{X}$ = 3.2) and supervisors ($\bar{X}$ = 2.8). Differences existed between supervisor and coordinator groups on two measures of resource exchange and also on the extent of agreement for that exchange. In both cases supervisors perceived a lower degree of exchange and a lower degree of agreement with the situation. The exchange of personnel and equipment was rated low ("no exchange or sharing") and fair agreement existed for these items. Overall exchange or sharing was very limited and fairly strong agreement existed for maintaining the existing arrangement.

PROGRAM INTEGRATION

The research instrument contained eight questions on integration for coordinators and supervisors and two questions for students. No significant difference among groups occurred on the overall measure of program integration. There were two aspects to integration: the school contribution and the sponsor contribution.

The extent of school contribution to program integration is contained in Table 52. Overall the school's contribution to

TABLE 52

THE SCHOOL CONTRIBUTION TO PROGRAM INTEGRATION

Item[a]	Student[f] Mean N = 94	Coordinator Mean N = 24	Supervisor Mean N = 73	Significant Difference
Do the skills and knowledge taught at the school help to understand the skills and knowledge needed on the job site?[b]	(2.88)	3.18	2.93	NSD
Is the Work Experience coordinator involved in instruction of students at the job site?[c]		1.26	1.46	NSD
Does the job supervisor receive assistance from the Work Experience coordinator in determining job content for students on Work Experience?[d]		2.30	1.75	*
Are classes for student workers held at the school during the Work Experience term?[e]		2.48	2.73	NSD
$\bar{X}$		2.30	2.16	NSD

[a]All items were rated on a 5 point scale.

[b]Response categories were 1 = no help, 2 = little help, 3 = fair help, 4 = much help, 5 = excellent help.

[c]Response categories were 1 = no, 2 = a little extent, 3 = fair extent, 4 = good extent, 5 = very good extent.

[d]Response categories were 1 = no assistance, 2 = a little assistance, 3 = a fair amount of assistance, 4 = a great amount of assistance, 5 = a very great amount of assistance.

[e]Response categories were 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = frequently.

[f]Student scores are included in this table for the convenience of the researcher. No comparisons were made between student and other group scores.

*Significant at the .05 level.

integration was fairly low particularly for the extent to which the coordinator was involved in instruction of students on the job site. Students, coordinators and supervisors perceived the school to be of moderate help in understanding the skills and knowledge needed on the job site. Classes for student workers were rarely held in the school during the Work Experience term. A significant difference occurred between coordinators and supervisors on the extent of assistance received by the supervisor in determining job content for students at the work site: coordinators rated their input higher than did supervisors.

The second set of indicators for program integration is the extent to which the sponsor contributes to program unity. Students, coordinators and supervisors perceived the skills and knowledge learned at the job site to be of moderate assistance in understanding the skills and knowledge needed in school (Table 53). The job supervisor is almost never involved in instruction in the school. While both groups rated job supervisor input into school course content low, a difference emerged on the amount of assistance given to the coordinator: supervisors perceived less input than did coordinators. Field trips to business and industry almost never happen; supervisors indicated a significantly higher incidence of visits than did coordinators.

Summary of the Findings

The extent to which school and sponsor contribute to Work Experience program unity was generally low. No significant

TABLE 53

THE SPONSOR CONTRIBUTION TO PROGRAM INTEGRATION

Item[a]	Student[f] Mean N = 94	Coordinator Mean N = 24	Supervisor Mean N = 73	Significant Difference
Do the skills and knowledge taught at the job site help to understand the skills and knowledge needed in school?[b]	(2.71)	2.96	2.96	NSD
Is the job supervisor involved in instruction of students at the school?[c]		1.09	1.35	NSD
Does the Work Experience coordinator receive assistance from the job supervisor in determining school course content for students on Work Experience?[d]		1.76	1.35	*
Are field trips to business and industry held for Work Experience students during the school term?[e]		1.36	1.76	*
$\bar{X}$		2.05	2.01	NSD

[a] All items were rated on a 5 point scale.

[b] Response categories were 1 = no help, 2 = a little help, 3 = fair help, 4 = much help, 5 = excellent help.

[c] Response categories were 1 = no, 2 = a little extent, 3 = fair extent, 4 = good extent, 5 = very good extent.

[d] Response categories were 1 = no assistance, 2 = a little assistance, 3 = a fair amount of assistance, 4 = a great amount of assistance, 5 = a very great amount of assistance.

[e] Response categories were 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = frequently.

[f] Student scores are included in this table for convenience. No comparisons were made between student and other group scores.

*Significant at the .05 level.

difference between coordinators or supervisors emerged on either school or sponsor contribution to learning skills and knowledge and this aspect was perceived to be moderate. The extent to which coordinators and supervisors were involved in instruction in each other's jurisdictions was perceived to be almost non-existent; both groups agreed on this measure. The amount of assistance received by coordinators from supervisors and by supervisors from coordinators in determining course content was also very low. Though differences existed between the two groups on this measure it was the coordinator group that perceived the greater amount of input into their own course component and the work site component. Program integration through field trips or through student return to school during the Work Experience term is a relatively rare occurrence.

RESPONSES TO THE OPEN-ENDED QUESTION

All respondents were given the opportunity to make comments about the school-sponsor relationship that may have been ignored or overlooked in the questionnaire. Students provided a total of 5 statements, coordinators made 3 comments and supervisors produced 30 comments.

Students provided two responses bearing on intensity of interaction, one response relating to program integration, and two comments relating to formalization (Table 54). It appears some students perceive a need for increased frequency of interaction with the coordinator. Course weighting was a concern

TABLE 54

STUDENT RESPONSE TO THE
OPEN-ENDED QUESTION

Response	Frequency	Category
Coordinator is accessible	1	Intensity
Coordinators do not visit often enough	2	Intensity
Work Experience meetings carry too much weight	1	Program Integration
Employer does not know what to do with students	1	Formalization
Keeping a diary and time sheet	1	Formalization

to one student. One student indicated that his employer appeared not to know what to do with students and one other student objected to keeping a diary and time sheet. One positive comment "the coordinator is available" emerged from the six made.

Coordinators made three comments, two of which concerned frequency of interaction: contact with the employer should be kept to a minimum, and the difficulty of locating students from time to time. The third comment questioned the purpose of this study.

Supervisors made 30 comments 25 of which had some bearing on the interorganizational variables under study. The list of comments is contained in Table 55. More than half of the comments made by this group related to the lack of

TABLE 55

SUPERVISOR RESPONSES TO THE OPEN-ENDED QUESTION

Response	Frequency	Category
One hour per day is too short a time	1	Intensity
Not enough communication between supervisors and coordinators	6	Intensity
Coordinator does not follow up	1	Intensity
Too much weight given to coordinator evaluation	1	Program Integration
Coordinators do not understand the business	2	Program Integration
Evaluation is too informal	3	Formalization
No student information at beginning of term	3	Formalization
Supervisors do not know what is expected of them	5	Formalization
Closer liaison needed - lack of communication	3	Formalization

formalization. Nearly one-third of the responses indicated a need for an increase in the intensity of the relationship. One twelfth of the responses cited factors involved in program integration.

SUMMARY

This section of the thesis reported the data emerging from the School-Sponsor Relations Questionnaire.

The majority of student responses and all supervisor responses indicated a need for increased frequency of interaction with the coordinator. Both supervisor and student comments suggested a desire to load course evaluation more on the job site component of the course. Increased formalization of some aspects of the program would be favored by supervisors.

The Work Experience program in the Province of Alberta appears to be characterized by a moderate degree of formalization, a relatively low extent of intensity, a moderate extent of reciprocity, and a low degree of program integration.

No statistically significant differences were observed between city and non-city samples on the measures used in this section.

CHAPTER 7

THE ASSOCIATION AMONG INTERORGANIZATIONAL LINKAGES, PERCEIVED PRIORITIES AND PERCEIVED BENEFIT ATTAINMENT

This chapter is concerned with the association among the interorganizational linkages of formalization, intensity, reciprocity, program integration, perceived priorities for and perceived attainment of Work Experience Education program benefits. Part one of this chapter addresses the relationship among scores assigned by students. Part two reports on the association among scores assigned by coordinators. Part three examines the relationship among scores assigned by supervisors.

LINKAGE DIMENSIONS, PROGRAM PRIORITIES, AND BENEFIT ATTAINMENT

One of the major problems posed in this study was to identify the degree of association, if any, among the program priorities, the extent of benefit attainment, and the linkage dimensions as perceived by students, coordinators, and supervisors. Most of the measures used in this study were positively related. However, to provide a focus for the examination of the data, and to limit the discourse to associations of strong probability, only those correlations achieving statistical significance at the 0.05 level of confidence or greater are discussed.

The Association Among Student Scores

Table 56 is an intercorrelation matrix for the global student variables used in this study. It is immediately apparent that all relationships are positive.

1. Cognitive priorities are associated with affective priorities.

2. The attainment of affective program benefits is associated with the degree of priority given to affective and cognitive program benefits.

3. The realization of cognitive program benefits is related to the degree of importance given to affective and cognitive program benefits and the extent of affective benefit attainment.

4. The degree of official sanctions specificity is related to the importance of cognitive and affective benefits and the attainment of cognitive and affective benefits.

5. Coordination activity formalization is associated with the importance of cognitive and affective benefits, the extent of cognitive and affective benefit attainment and the degree of official sanction specificity.

Discussion. The degree of importance assigned to affective program benefits will most likely affect the degree of importance ascribed to cognitive program benefits, the extent to which cognitive and affective program benefits are perceived to be realized and the extent to which official sanctions and coordination activities are formalized. If cognitive program benefits are

TABLE 56

STUDENT SAMPLE

CORRELATIONS AMONG PROGRAM PRIORITIES, PERCEIVED BENEFIT ATTAINMENT AND ORGANIZATIONAL VARIABLES

	Affective Priorities	Cognitive Priorities	Affective Attainment	Cognitive Attainment	Official Sanctions	Coordination Activities	Liaison Activities	Frequency of Interaction	Resource Commitment	Resource Exchange	Resource Exchange Agreement	School Contribution to Integration	Sponsor Contribution to Integration
Affective Priorities	1.00	0.70**	0.63**	0.52**	0.14	0.25**	-	-	-	-	-	-	-
Cognitive Priorities		1.00	0.54**	0.73**	0.12	0.24**	-	-	-	-	-	-	-
Affective Attainment			1.00	0.69**	0.08	0.22**	-	-	-	-	-	-	-
Cognitive Attainment				1.00	0.14	0.36**	-	-	-	-	-	-	-
Official Sanctions					1.00	0.23**	-	-	-	-	-	-	-
Coordination Activities						1.00	-	-	-	-	-	-	-
Liaison Activities							1.00	-	-	-	-	-	-
Frequency of Interaction								1.00	-	-	-	-	-
Resource Commitment									1.00	-	-	-	-
Resource Exchange										1.00	-	-	-
Resource Exchange Agreement											1.00	-	-
School Contribution to Integration												1.00	-
Sponsor Contribution to Integration													1.00

**Statistically Significant at greater than the 0.05 level.

- No questions were asked of students regarding these items.

given high priority, it is more likely that affective and cognitive benefits will be realized and that official sanctions and coordination activities will be formalized.

As affective program benefits are realized, the realization of cognitive program benefits and the possibility of official sanctions and coordination activities formalization should be enhanced.

As cognitive benefit attainment is perceived to increase, one should observe a corresponding increase in the degree of official sanctions and the degree of coordination activity formalization.

As official sanctions are formalized a corresponding increase in coordination activity formalization should be observed.

The Association Among Coordinator Scores

Table 57 is an intercorrelation matrix for the global coordinator variables used in this study. It is clear that not all relationships are positive.

1. Cognitive and affective priorities are correlated.

2. The attainment of affective program benefits is associated with the degree to which priority is given to affective and cognitive program benefits.

3. The attainment of cognitive program benefits is related to the degree of importance given to affective and cognitive program benefits and the degree to which affective benefits are realized.

TABLE 57

COORDINATOR SAMPLE

CORRELATIONS AMONG PROGRAM PRIORITIES, PERCEIVED BENEFIT ATTAINMENT AND ORGANIZATIONAL VARIABLES

	Affective Priorities	Cognitive Priorities	Affective Attainment	Cognitive Attainment	Official Sanctions	Coordination Activities	Liaison Activities	Frequency of Interaction	Resource Commitment	Resource Exchange	Resource Exchange Agreement	School Contribution to Integration	Sponsor Contribution to Integration
Affective Priorities	1.00	0.79**	0.64**	0.59**	0.14	-0.33	0.18	0.40**	0.00	0.03	0.20	0.22	0.15
Cognitive Priorities		1.00	0.69**	0.72**	0.24	-0.26	0.01	0.33	0.08	0.10	0.22	0.39**	0.27
Affective Attainment			1.00	0.79**	0.39**	-0.02	0.12	0.27	0.30	-0.09	0.21	0.32	0.38**
Cognitive Attainment				1.00	0.18	-0.09	0.14	0.17	0.10	0.02	0.02	0.39**	0.44**
Official Sanctions					1.00	0.28	0.24	0.53**	0.45**	0.02	0.40**	0.31	0.32
Coordination Activities						1.00	0.09	0.14	0.35*	0.08	0.10	0.36*	0.24
Liaison Activities							1.00	0.20	0.19	0.26	0.18	0.22	0.25
Frequency of Interaction								1.00	0.24	0.39**	0.41**	0.43**	0.23
Resource Commitment									1.00	0.19	0.29	0.24	0.50
Resource Exchange										1.00	0.14	0.20	0.45**
Resource Exchange Agreement											1.00	0.07	-0.20
School Contribution to Integration												1.00	0.56**
Sponsor Contribution to Integration													1.00

*Statistically Significant at the 0.05 level.

**Statistically significant at greater than the 0.05 level.

4. The degree of official sanctions formalization is related to the perceived degree of affective and cognitive benefit attainment.

5. Coordination and liaison activity formalization are not statistically significantly related.

6. The frequency of interaction is related to the importance ascribed to affective benefits and the degree of official sanctions formalization.

7. Resource commitment is associated with the degree of official sanctions and coordination activity formalization.

8. The degree of resource exchange correlated with the frequency of interaction measure.

9. Resource exchange agreement is related to the degree of official sanctions formalization and the frequency of interaction measure.

10. The extent of the school contribution to program integration correlates with the importance of cognitive priorities, the perceived level of cognitive benefit attainment, the extent of coordination activity formalization and the frequency of interaction.

11. The extent of sponsor contribution to program integration is related to the perceived degree of affective and cognitive benefit attainment, the degree of resource exchange and the degree to which the school contributed to program integration.

It is interesting that affective and cognitive benefit attainment and affective and cognitive priorities for Work Experience Education are negatively, though not statistically significantly, related to the formalization of coordination activities.

Discussion. The degree of importance assigned to affective program benefits will most likely affect the degree of importance ascribed to cognitive benefits, the extent to which cognitive and affective benefits are perceived to be realized and the frequency of interaction among the parties involved.

If cognitive benefits are given high priority, it appears to be more likely that cognitive and affective benefits will be realized and that the school contribution to program integration may increase.

The realization of affective program benefits ought to enhance the possibility of realization of cognitive program benefits, the formalization of official sanctions and the sponsor contribution to program integration.

As official sanctions become more formalized, one should observe a corresponding increase in the frequency of interaction between school and sponsor, the amount of resources committed to the program and the degree of resource exchange agreement.

As coordination activities become more formalized, one may observe a corresponding increase in the amount of resources committed to the program and an increase in the school contribution to program integration.

An increase in the frequency of interaction between school and sponsor ought to enhance the possibility of increased resource exchange, increased resource exchange agreement and increased school contribution to program integration.

Increases in resource exchange and school contributions

to program integration ought to enhance the possibility of increased sponsor contributions to program integration.

As the school contribution to program integration increases, one may observe increases in sponsor contributions to integration.

The Association Among Supervisor Scores

Table 58 is an intercorrelation matrix for the global supervisor variables used in this study; all relationships are positive.

1. Cognitive and affective program priorities are associated.

2. The attainment of affective program benefits is associated with the degree of priority given to affective and cognitive program benefits.

3. The realization of cognitive program benefits is related to the degree of importance ascribed to affective and cognitive program benefits and the extent of affective benefit attainment.

4. Official sanctions formalization is correlated with the priority ascribed to and the perceived attainment of affective and cognitive program benefits.

5. Coordination activity formalization, cognitive priorities, perceived cognitive benefit attainment and official sanctions formalization are associated.

TABLE 58

SUPERVISOR SAMPLE

CORRELATIONS AMONG PROGRAM PRIORITIES, PERCEIVED BENEFIT ATTAINMENT AND ORGANIZATINAL VARIABLES

	Affective Priorities	Cognitive Priorities	Affective Attainment	Cognitive Attainment	Official Sanctions	Coordination Activities	Liaison Activities	Frequency of Interaction	Resource Commitment	Resource Exchange	Resource Exchange Agreement	School Contribution to Integration	Sponsor Contribution to Integration
Affective Priorities	1.00	0.78**	0.47**	0.50**	0.28**	0.17	0.15	0.15	0.26**	0.12	0.22**	0.23**	0.00
Cognitive Priorities		1.00	0.47**	0.65**	0.40**	0.29**	0.23**	0.19	0.23	0.14	0.17	0.24**	0.13
Affective Attainment			1.00	0.70**	0.31**	0.19	0.33**	0.20*	0.27**	0.14	0.24**	0.35**	0.10
Cognitive Attainment				1.00	0.31**	0.21**	0.21**	0.24**	0.35**	0.24**	0.21**	0.21**	0.09
Official Sanctions					1.00	0.62**	0.44**	0.27**	0.15	0.39**	0.29**	0.41**	0.11
Coordination Activities						1.00	0.47**	0.48**	0.04	0.17	0.22**	0.29**	0.24**
Liaison Activities							1.00	0.32**	0.10	0.28**	0.14	0.34**	0.17
Frequency of Interaction								1.00	0.16	0.29**	0.39**	0.36**	0.46**
Resource Commitment									1.00	0.11	0.37**	0.26**	0.08
Resource Exchange										1.00	0.31**	0.19	0.16
Resource Exchange Agreement											1.00	0.30**	0.15
School Contribution to Integration												1.00	0,37**
Sponsor Contribution to Integration													1.00

*Statistically Significant at the 0.05 level.

** Statistically significant at greater than the 0.05 level.

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6. Liaison activity formalization varies with the degree of cognitive benefit priority, the perceived attainment of affective and cognitive program benefits, official sanction formalization and coordination activity formalization.

7. A relationship emerged between the frequency of interaction between school and sponsor and the degree to which cognitive and affective benefits were perceived to be attained and the degree to which official sanctions, liaison activities and coordination activities were formalized.

8. The extent to which resources are committed is associated with affective and cognitive priorities and associated with the perceived realization of affective and cognitive program benefits.

9. The extent to which resources are exchanged between school and sponsor varies with the degree of cognitive benefit attainment, the degree of official sanctions and liaison activity formalization and the frequency of interaction between the school and the sponsor.

10. The extent of resource exchange agreement varies with the priorities ascribed to affective benefits, the perceived attainment of affective and cognitive benefits, the degree of official sanctions and coordination activity formalization, the frequency of interaction between school and sponsor, the extent of resource commitment and the extent of resource exchange between school and sponsor.

11. The school contribution to program integration is associated with the extent of affective and cognitive benefit realization, the degree of official sanctions, coordination and liaison activity formalization, the frequency of interaction between school and sponsor, the extent of resource commitment and the extent of resource exchange agreement.

12. Finally, the extent of the sponsor contribution to program integration is related to the extent of coordination activity formalization, the frequency of interaction and the extent of the school contribution to program integration.

Discussion. The degree of importance ascribed to affective program benefits will most likely affect the degree of importance ascribed to cognitive priorities and perceived cognitive benefits, the extent to which affective and cognitive benefits are perceived to be realized, the extent to which official sanctions are formalized, the extent to which resources are committed, the extent of resource exchange agreement and the extent of the school contribution to integration.

If cognitive benefits are given high priority, it appears to be more likely that cognitive and affective benefits would be realized, that official sanctions, coordination and liaison activities would become more formalized, that resource commitment would increase and that the school contribution to integration would increase. Affective benefit attainment would be more likely if cognitive benefits were realized, if official sanctions were formalized, if resource commitment increased, if liaison activities

were formalized, if resource commitment increased, if resource exchange agreement increased and if the school contribution to program integration were increased. Cognitive benefit attainment would be more apt to occur if official sanctions, coordination activity and liaison activity formalization were increased, if frequency of interaction, resource commitment, exchange and agreement and school contribution to integration were increased. Official sanctions formalization would most likely emerge from increased coordination activity formalization, from increased liaison activity, from increased frequency of interaction, from increased resource exchange and resource exchange agreement and from increased school contribution to program integration.

Coordination activity formalization would likely be accompanied by increased liaison activity formalization, increased frequency of interaction, increased resource exchange agreement and two-way program integration.

Increased liaison activity formalization would be more apt to occur if the frequency of interaction, the extent of resource exchange and the school contribution to integration were increased.

A high frequency of interaction appears to be more likely if there existed a high degree of resource exchange, resource exchange agreement and a high degree of two-way contribution to program integration.

Resource commitment would be more likely to be forthcoming if a high degree of resource exchange agreement and a

high degree of school contribution to program integration were present. Resource exchange appears to be more likely where there is agreement regarding the resource exchange.

School and sponsor contributions to program integration are interrelated and increases by one contributor ought to be followed by increases by the other contributor.

CHAPTER SUMMARY

It is clear that evidence exists among student, coordinator, and supervisor ratings that program benefit priorities and perceived attainment of those benefits are interrelated. Clearly, the attainment of cognitive and affective program benefits depends upon the importance ascribed to those benefits.

It appears that the formalization of official sanctions would most likely contribute to the realization of affective program benefits.

Cognitive benefit attainment appears to be influenced by the extent of official sanctions formalization, and the degree of the school contribution to program integration.

The effectiveness of the Work Experience program appears to be contingent upon a number of organizational factors. However, it is clear that the organizational variables are also interconnected.

The extent of school and sponsor commitments to program integration is interconnected, therefore increases from one contributor ought to result in increases from the other contributor.

Coordination activity formalization would likely be accompanied by increased liaison activity formalization.

Increased liaison activity formalization would be more apt to occur if the frequency of interaction and the school contribution to integration were increased.

The higher frequency of interaction appears to be more likely if there existed a high degree of resource exchange agreement and a high degree of school and sponsor contribution to program integration.

Resource commitment would be more likely to be forthcoming if a high degree of resource exchange agreement were present.

School and sponsor contributions to program integration are interrelated.

It is clear that evidence exists among student, coordinator, and supervisor scores that program benefit priorities and perceived attainment of those benefits are interrelated.

Clearly, the attainment of cognitive and affective program benefits depends upon the importance ascribed to those benefits.

It appears that the formalization of official sanctions, the formalization of liaison activities and increased school contributions to program integration would contribute to the realization of affective program benefits.

Official sanctions formalization is most likely to emerge from higher degrees of interaction and a higher degree of resource

exchange agreement. Liaison activity formalization will most likely emerge as the frequency of interaction, the degree of resource exchange and the school contribution to program integration increase, however, the evidence to support this assertion is not strong. The frequency of interaction is more likely to be higher if the degree of resource exchange, the degree of resource exchange agreement and the degree of school contribution to program integration were increased. Resource commitment would be most likely to follow from increases in resource exchange agreement and increases in the school contribution to program integration.

Program outcomes depend, in large measure, upon the transactions between school and sponsor and the priorities ascribed to some of the antecedents to the program. It seems equally certain that program outcomes are determined, to some extent, by the types of linkages adopted by the school and the sponsor.

No statistically significant differences were observed between city and non-city samples on the measures used in this section.

CHAPTER 8

SUMMARY OF THE STUDY, GENERAL ANALYSIS, IMPLICATIONS OF THE FINDINGS AND DIRECTIONS FOR FURTHER RESEARCH

This chapter is divided into four parts: a summary of the study, generalization, implications and directions for further research.

This section of the thesis includes the findings reported in Chapters 5, 6, and 7 on student learning activities, linkage dimensions and the effectiveness of the Work Experience Education program. This review is set against the theoretical background and literature presented in Chapter 2. The format adopted follows the format devised by Andrews (1978) in order to aid the reader where comparisons must be made.

SUMMARY OF THE STUDY

This study was concerned with the kinds of linkages that join organizations involved in a cooperative program and the effect of those linkages on program priorities and program outcomes. The work of Marrett (1971), Hasenfeld and English (1974), Hall (1977) and Andrews (1978) suggested that the manner in which organizations are joined could provide valuable information for educational researchers.

Focus of the Study

The major focus of this study was on the relationships that exist between interorganizational relations and perceived program

outcomes in Work Experience Education in secondary schools in Alberta.

Justification for the Study

This study was justified for the following reasons. First, interorganizational relations between schools and business organizations require further research. Second, schools are becoming more involved with business and industry in order to develop and implement cooperative programs. Third, the types of linkages adopted by these organizations may affect program outcomes, and it is possible that cooperating organizations could enhance program outcomes by altering the way in which schools and sponsors are linked together.

Conceptual Framework

The conceptual framework employed in this study was developed from the work of Marrett (1971) and Lawrence and Lorsch (1969). The extent of formalization, intensity and reciprocity of the relationship and the degree of program integration were the specific linkage dimensions developed in this study; the attainment of program benefits was also considered to be an important variable. This investigation was exploratory, hence, no hypotheses were generated.

Respondents in the Study

The respondents in this study were all directly involved in the Work Experience program. Students registered in the

program, school coordinators, and the students' immediate job supervisors constituted the research sample.

Instrument Development

In order to measure respondent perceptions of linkage dimensions, program priorities and perceptions of benefit attainment, two instruments were required. A search of available instrumentation failed to disclose a validated means of measuring the research variables in a secondary school context; therefore, two instruments were created by the researcher.

The validity and reliability of the instruments were established by using an interview/questionnaire technique and by comparing these data with written documentation. The administration/interview/documentation technique was used in three separate school jurisdictions. Data from a variety of sources suggested that validity and reliability had been reasonably established.

Questionnaires were administered to the research sample beginning the week of January 7, 1980.

Data Collection

The sole means of data collection was through the instruments described below.

The School Sponsor Relations Questionnaire

This instrument was composed of two parts. Part one was designed to obtain data on selected personal and program

characteristics, whereas the second part was used to gather data on linkage variables. Respondents checked, filled in, or circled appropriate responses.

Students were requested to respond to 7 personal and 6 organizational items; coordinators were asked to react to 14 personal and program items and 36 organizational questions; supervisors were requested to respond to 12 personal and program questions and 36 questions relating to linkages between school and sponsor. All respondents were given an opportunity to comment or to extend the list of linkages identified by the researcher.

The Opinionnaire on Student Learning Activities

This opinionnaire was composed of 18 statements regarding anticipated student learning activities. Each respondent was requested to make two decisions about each statement: the importance of the activity, and the frequency with which that activity was perceived to occur. Respondents were directed to circle the appropriate response category. Respondents were also encouraged to comment on positive and negative factors associated with the program.

Limitations of the Study

At the outset of this study, a number of decisions had to be made regarding the ways in which the data might be gathered and examined. It was decided that data would best be gathered through questionnaires distributed to the three groups

of people most closely associated with the program. The instruments were designed to gather perceptual data on organizational and program issues. Because the data were perceptual, it is possible that interpretation of a given situation could be distorted. However, it was assumed that the perceptions of respondents would result in valid and authentic responses. It could also be argued that respondents' behavior in the Work Experience situation would be a result of their perception of the situation.

The low rate of return of instruments from one large urban center presented a second finding. However, there is no reason to expect that this center would seriously affect generalizations to the rest of the Work Experience programs in the province. Even so, the specific findings require further research to ascertain their validity in other locales for other cooperative secondary school settings.

Data Treatment

All data were coded on data processing cards for analysis in accordance with the requirements of the computer program.

The perceptions of coordinators and supervisors of interorganizational linkages, items to which students did not respond, were compared through the use of a "t" test to determine the extent of agreement between groups.

The "F" test, Scheffe procedure, was employed to compare the responses of student, coordinator and supervisor samples, on those items to which all groups responded: priorities and perceived attainment of anticipated benefits.

The perceptions of students of interorganizational variables, program priorities and perceived attainment of program benefits were analyzed through the use of the Pearson Product-Moment Correlation. Similar analyses were completed for coordinators and for supervisors.

GENERAL ANALYSIS

Many variations in the overall pattern of a linkage dimension could exist depending on the limitations one dimension would place on another. The purpose of this part of the chapter is to examine the findings on linkage dimensions to determine if any of the patterns, thus far identified, emerged in this study. Chapter two provided a discussion of the conceptual framework developed by Marrett (1971) and Andrews (1978). In order to predict specific relationships among linkage indicators, Marrett (1971:95) argued that two models could exist. One model was characterized by low formalization, intensity and standardization, whereas the second model was described as possessing a high degree of formalization, intensity and standardization. Cooperative programs, argued Marrett (1971:97), should conform to the second model though she thought this unlikely because of the commitments required by such a model.

The findings of this study provide support for Marrett's (1971) contention that the characteristics of her second model are not likely to exist unless well-defined and valuable resources were to accrue to the organization in light of the sorts of investments and commitments that would be required of organizations. The Alberta Work Experience program exhibited most of the characteristics that she proposed for her first model: low formalization, intensity and reciprocity.

The existence of formal agreements, procedural standardization and high reciprocity would indicate large resource commitments among the organizations involved. It is unlikely that an organization would commit extensive resources to other organizations in the absence of formal agreements. The Work Experience program is also characterized by low resource commitment.

Marrett (1971:96) also observed that the amount of coordination is also important where extensive resources are committed by an organization. Because formal agreements tend to reduce organizational autonomy, Guetzkow (1966) contends that organizations are not likely to enter formal agreements unless forced to do so. Hall (1972) argued that an inverse relation existed among formalization and innovation, rate of change and freedom of choice. There are a number of writers who have discussed the importance of power dependencies found in inter-organizational relationships. For instance, Schmidt and Kochan (1977:220) argued that the reasons that organizations enter into

interorganizational relationships are that one party is motivated to interact; the other is not.

The formalization of coordination activities and the extent of resource commitment were low in the Work Experience program. If sponsors are willing to commit existing resources on a relatively informal basis, there is no reason for a formal relationship. The acceptance of a formal explicit set of guidelines would decrease sponsor organizational autonomy; hence, freedom to innovate. The same is probably so for the school organization. Power lies with the sponsoring organization; however, it is the school that is forced to interact with the sponsoring organization if the resources of industry and business are to be made available to students. This would help to explain the relatively low formalization of sanctions, coordination and liaison activities, low resource commitment and exchange, and perhaps, the low degree of program integration between school and sponsor.

The final finding on linkage dimensions was related to the frequency of interaction between the actors in the Work Experience program. Schmidt and Kochan (1972:222) contend that ". . . the greatest frequency of interaction will occur when both organizations perceive benefits from interaction. . . ." Analysis of variance revealed a fairly strong relationship among frequency of interaction, resource exchange, resource exchange agreement and school contribution to program integration. The kinds of benefits accruing to school and sponsor through the Work

Experience program are associated with increased student knowledge of the relationship among school and business and industry which results in a better student and a better worker. If the Work Experience program were more highly integrated, and therefore of increased benefit to school and sponsor, it could be argued that an increased frequency of interaction would be more acceptable to both agencies.

The discussion and analysis of the findings suggest that certain linkages in Work Experience Education are more interrelated than others. While the relatively low return rate from some respondent samples represents a limitation on the interpretation of the findings of this study there are some generalizations to be made. One purpose of this thesis was to develop some generalizations about cooperative programs. Kerlinger (1973:324) argues: "In applied research . . . the central interest [of] generalizability [is to] apply the results to other persons and to other situations."

The following propositions were generated from a comparison of data emerging from the intercorrelation matrices on pages 139, 141 and 143. Student, coordinator and supervisor correlations were compared for commonality, and all propositions were generated on this basis. The propositions were based on common elements being found in at least two groups.

A fairly high correlation emerged between program priorities and program benefit attainment. This finding generated the first proposition.

Proposition #1

If a cooperative program is characterized by high priorities for attaining program benefits, then that program is likely to be characterized by a higher degree of program benefit attainment.

The attainment of affective benefits was associated with the degree of importance of affective and of cognitive program benefits. This finding generated proposition two.

Proposition #2

If affective and cognitive program benefits are accorded high priority in a cooperative program, it is most likely that the program will be characterized by a higher degree of affective benefit attainment.

The attainment of cognitive program benefits was related to the degree of importance given to affective and cognitive program benefits and the extent to which affective benefits are perceived to be attained. Proposition three emerged from this relationship.

Proposition #3

If affective and cognitive program benefits are accorded high priority and if a high degree of affective benefit attainment is perceived, the cooperative program is more likely to be characterized by a higher degree of program benefit attainment.

Official sanctions formalization was associated with the degree to which affective and cognitive benefits were attained. This finding generated proposition four.

Proposition #4

If affective and cognitive program benefits are perceived to be attained in a cooperative program, it is most likely that the program will be characterized by a higher degree of official sanctions formalization.

Coordination activity formalization, affective and cognitive priorities and affective benefit attainment were related. Proposition five was generated from this finding.

Proposition #5

If affective and cognitive benefits are accorded high priority, if a high degree of affective and cognitive benefit attainment is perceived and if a high degree of official sanctions formalization is evident in a cooperative program, it is likely that a cooperative program will be characterized by a higher degree of coordination activity formalization.

The frequency of interaction between school and sponsor correlated with the extent of resources exchanged between school and sponsor and the degree of official sanctions formalization. This relationship suggested proposition six.

Proposition #6

If a cooperative program is characterized by a high degree of resource exchange and a high degree of official sanctions formalization, it is likely that the program will be characterized by a higher frequency of interaction.

Resource exchange agreement was related to official sanctions formalization and the frequency of interaction between school and sponsor. Proposition seven was generated from this relationship.

Proposition #7

If a cooperative program is characterized by a high degree of official sanctions formalization and a high degree of frequency of interaction, it is likely that the program will be characterized by a higher degree of resource exchange agreement.

Cognitive benefit priorities, cognitive benefit attainment, coordination activity formalization and frequency of interaction were associated with the school contribution to program integration. This finding gave rise to proposition eight.

Proposition #8

If a cooperative program is characterized by a high degree of cognitive benefit priority, by a high degree of cognitive benefit attainment, by a high degree of coordination activity formalization and a high frequency of interaction, it is likely that

the program will be characterized by a higher degree of school contribution to program integration.

Finally, a relationship emerged between the sponsor contribution to program integration and the school contribution to program integration. This finding generated proposition nine.

Proposition #9

If a cooperative program is characterized by a high degree of school contribution to program integration, it is likely that the program will be characterized by a higher degree of sponsor contribution to program integration.

IMPLICATIONS OF THE FINDINGS

A number of implications can be identified on the basis of the research findings and the conclusions drawn. The implications are presented in three parts: implications for inter-organizational theory, the implications for educational administration and implications for Work Experience programming.

Implications for Inter-organizational Theory

The basic task of this study was to determine if a given linkage profile was related to the extent of program benefit attainment. A careful examination of the generalizations suggests several possible relationships among the variables investigated in this thesis. Within the context of this study the following implications emerged.

The first implication of the findings is that if affective or cognitive program benefits are to be realized, it will depend upon the importance ascribed to those benefits and the degree to which the official sanctions are formalized.

Second, the degree to which official sanctions are formalized, the extent of affective and cognitive benefit attainment, and the extent of affective and cognitive priority appears to have an effect upon the formalization of coordination activity.

Third, official sanctions formalization and resource exchange appear to have impact upon the frequency of interaction between school and sponsor.

Fourth, official sanctions formalization and the frequency of interaction may have an effect upon the degree of resource exchange agreement.

Fifth, the school and sponsor contributions to program integration are interrelated.

Last, the school contribution to program integration appears to be affected by the frequency of interaction between school and sponsor, the degree to which coordination activities are formalized, the extent to which program benefits are perceived to be realized and the degree of importance ascribed to those benefits.

It is clear that more research needs to be conducted on what constitutes meaningful determinants of the linkages employed in this thesis. As Marrett (1971) has observed there are many "Barriers to or facilitators of cooperation. . . ." It is clear

that the issues encompassing interorganizational theory are complex and that further research is needed to confirm or reject the findings of this study.

Implications for Educational Administration

Because secondary schools are becoming increasingly involved with business and industry as the demand for outside resources increases, pressure has been exerted on administrations to acknowledge the constraints inherent in cooperative programs.

The first implication of the findings is that if increased benefit attainment is a goal of the program, then Work Experience coordinators should examine the pattern of linkages that have developed in the program to ensure that responsibility and accountability are clearly set out.

Second, the coordination and procedural arrangements within Work Experience programs appear to differ according to the nature of the relationship. Administrators, therefore, should be aware that the formal or informal basis of that relationship may affect the way in which individuals within the program perceive their tasks.

The third implication of the findings for educational administrators relates to measures of program effectiveness. Metfessel and Michael (1973:269) argue that a multiple criteria approach is likely to generate more information about a program than a single criterion approach when a program evaluation is attempted. However, some conflict among the findings produced

by the data sources can be expected. Because of the discrepancies among student, coordinator and supervisor perceptions on program outcomes, administrators should monitor Work Experience programs carefully and frequently.

The fourth implication of the research findings relates to program coordination procedures. Those programs that were characterized by high formalization also reported more frequent attainment of program benefits. The inference from this finding is that any Work Experience program should have some formal method of coordination established.

As noted above the implications for cooperative programs are numerous. Knowledge of the theoretical bases for interorganizational relationships should aid educational administrators in making cooperative programs more effective. The topic of interorganizational relations, therefore, should be included as part of a preparation program for educational administrators.

Implications for Work Experience Programming

To be sure, more research is needed to determine those linkages which would most affect program outcomes. However, a number of implications for Work Experience programming can be derived from the data.

The first implication for programming is for students to be instructed in the importance of the goals and the potential benefits of Work Experience Education to them; the attainment of benefits is a function of their importance.

The second implication of the findings is that formalization of role expectancies and the formalization of reporting methods (coordination) has an affect on program outcomes. These data suggest that all participants would benefit from formal sessions which deal with these aspects.

The third implication relates to resource exchange and role expectation formalization; these activities would be enhanced through interaction between supervisor and coordinator. The coordinator must appear in the workplace more often if the sponsor is going to share resources with the school.

It seems equally clear that school contributions to program integration should generate important benefits to the program. If the school component of the program was related more specifically to sponsor needs and requirements it seems to follow that the sponsor would be more willing to integrate with the school component. This would have the effect of clarifying reasons for interactions between coordinator and supervisor, for clarifying coordination mechanisms and clarifying the criteria for measuring affective and cognitive benefit attainment. This is the fifth, and perhaps, the most important implication of the findings for programming.

DIRECTIONS FOR FURTHER RESEARCH

Many suggestions for further research have been generated by this study. However, only the principal suggestions will be presented for consideration.

Relationship Between Linkage Formalization and Program Effectiveness

Due to the limitations of this study, one cannot state unequivocally that the propositions apply to all Work Experience or other cooperative programs. In order to accept or reject the propositions presented earlier in this chapter, further research on linkage dimensions in cooperative programs would be useful.

It was previously stated that any relationship imputed between interorganizational linkages and program outcomes is to be viewed as tentative. This study did, however, find that the more formalized linkages were related to the outcomes of the Work Experience programs in many ways. The more formalized programs did appear to possess a higher degree of program benefit attainment than the less formalized programs. While this study did not establish any causal relationships between formalization and program outcomes, one relationship between these variables appears to be worthy of further research. The relationship suggested is that a Work Experience program that exhibits low formalization, program integration and relative resource commitment is likely to result in a lower degree of benefit attainment than a program that exhibits high formalization, program integration and relative resource commitment.

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APPENDICES

APPENDIX A

SCHOOL-SPONSOR RELATIONS QUESTIONNAIRE

WORK EXPERIENCE

SCHOOL-SPONSOR

RELATIONS

QUESTIONNAIRE

Terms used in the questionnaire

To avoid confusion in terms used in the questionnaire some clarification is needed.

Coordinator: Usually the work experience coordinator in the school. Teaches Work Experience 25 and/or 35 and supervises students on the job site.

Job Supervisor: Usually the person on the job site who supervises the student worker.

Sponsor: The business/industrial organization that accepts the student for temporary employment on a work site.

School: The educational organization that offers Work Experience 25 and/or 35 at the grade 10, 11, and 12 level.

Instructions:

This part of the questionnaire is designed to evaluate the way in which your work experience program is organized between the school and the job site. Based on your perception of the work experience program please respond to each statement as accurately as possible.

Circle the number that corresponds most closely to your perception of the situation.

For Example:

How often does it snow during the winter in Alberta?

1	2	3	(4)	5
Never	rarely	sometimes	often	frequently

If your perception of Alberta winters leads you to think it snows often you would circle the (4)

	Vague, unavailable or nonexistent	Generally understood	Poorly written	Clearly written	Very clearly written	Please do not write in this space
1. Other than the standard work experience agreement between student, parent, schoolboard and sponsor how would you describe the agreement that exists between the school and the sponsor?	1	2	3	4	5	5
2. How completely are the responsibilities of the work experience coordinator specified?	1	2	3	4	5	6
3. How completely are the responsibilities of the work experience job supervisor specified?	1	2	3	4	5	7
4. How completely are the responsibilities of the work experience student specified?	1	2	3	4	5	8
5. How compltely are the methods for work experience program reporting between school and sponsor specified?	1	2	3	4	5	9
6. How completely are the coordinator's methods for reporting on the work experience program specified?	1	2	3	4	5	10
7. How completely are the supervisor's methods for reporting on the work experience program specified?	1	2	3	4	5	11
8. How completely are the student's methods for reporting on the work experience program specified?	1	2	3	4	5	12

9. When changes are made in routines or procedures in the school how is the job supervisor usually notified?

1	2	3	4	5	13
not reported	verbally reported	memo with verbal explanation	memo with written short explanation	memo with written extensive explanation	

10. When changes are made in routines or procedures on the job site how is the school coordinator usually notified?

1	2	3	4	5	14
not reported	verbally reported	memo with verbal explanation	memo with written short explanation	memo with written extensive explanation	

11. In aiding the work experience program to keep up-to-date with the latest developments in business and industry how is the school coordinator usually notified?

1	2	3	4	5	15
not reported	verbally reported	memo with verbal explanation	memo with written short explanation	memo with written extensive explanation	

12. In aiding the work experience program to keep up-to-date with the latest developments in the school how is the job supervisor usually notified?

1	2	3	4	5	16
not reported	verbally reported	memo with verbal explanation	memo with written short explanation	memo with written extensive explanation	

13. Does the work experience coordinator visit the job site?

1	2	3	4	5	17
Never	Rarely	Sometimes	Often	Frequently	

14. Does the job supervisor visit the school?

1	2	3	4	5	18
Never	Rarely	Sometimes	Often	Frequently	

15. Do the work experience coordinator and the job supervisor communicate about student progress?

1	2	3	4	5	19
Never	Rarely	Sometimes	Often	Frequently	

16. Do the work experience coordinator and the job supervisor exchange ideas on program related problems related to the work site?

1	2	3	4	5	20
Never	Rarely	Sometimes	Often	Frequently	

17. Do the skills and knowledge taught at the school help to understand the skills and knowledge needed on the job site?

1	2	3	4	5	21
no help	a little help	fair help	much help	excellent help	

18. Is the work experience coordinator involved in instruction of students at the job site?

1	2	3	4	5	22
no	a little extent	fair extent	good extent	very good extent	

19. Does the job supervisor receive assistance from the work experience coordinator in determining job content for students on work experience?

1	2	3	4	5	23
no assistance	a little assistance	a fair amount of assistance	a great amount of assistance	a very great amount of assistance	

20. Are classes for student workers held at the school during the work experience term?

1	2	3	4	5	24
Never	Rarely	Sometimes	Often	Frequently	

21. Do the skills and knowledge taught at the job site help to understand the skills and knowledge needed in school?

1	2	3	4	5	25
no help	a little help	fair help	much help	excellent help	

22. Is the job supervisor involved in instruction of students at the school?

1	2	3	4	5	26
no	a little extent	fair extent	good extent	very good extent	

23. Does the work experience coordinator receive assistance from the job supervisor in determining school course content for students in work experience?

1	2	3	4	5	27
no assistance	a little assistance	a fair amount of assistance	a great amount of assistance	a very great amount of assistance	

24. Are field trips to business and industry held for work experience students during the school term?

1	2	3	4	5	28
Never	Rarely	Sometimes	Often	Frequently	

25. Since your organization became involved in work experience what amount of equipment was purchased primarily for work experience?

1	2	3	4	5	29
No purchase made	considered students in purchases	limited purchases made	purchases increased variety	purchases increased number and variety	

26. Since your organization became involved in work experience how many staff have been engaged primarily for work experience? 30

1	2	3	4	5
no staff increase	considered students in staffing	limited staff increase	increased variety of staff	increased number and variety of staff

27. How much time is allowed to <u>you</u> for student supervision and instruction? 31

1	2	3	4	5
no time allowed	very limited time allowed	limited time allowed	adequate time allowed	as much as is required

28. How much effort is needed from you to keep the program going? 32

1	2	3	4	5
too much effort	considerable effort	limited effort	very limited effort	no effort

29. Do the school and the sponsor share or exchange personnel for work experience? 33

1	2	3	4	5
no exchange or sharing	very limited exchange or sharing	limited exchange or sharing	exchange or sharing as needed	regular exchange or sharing

30. Do the school and the sponsor share or exchange equipment for work experience? 34

1	2	3	4	5
no exchange or sharing	very limited exchange or sharing	limited exchange or sharing	exchange or sharing as needed	regular exchange or sharing

31. Do the school and the sponsor share or exchange information on student progress/behavior in work experience? 35

1	2	3	4	5
no exchange or sharing	very limited exchange or sharing	limited exchange or sharing	exchange or sharing as needed	regular exchange or sharing

32. Do the school and the sponsor share or exchange ideas for final student evaluation on work experience? 36

1	2	3	4	5
no exchange or sharing	very limited exchange or sharing	limited exchange or sharing	exchange or sharing as needed	regular exchange or sharing

The next four questions seek your opinion in regard to the existing sharing or exchange arrangement between school and sponsor.

We would like to know if you agree with the existing situation.

For example: It is possible to have regular sharing without agreeing with the situation. Also, it is possible that no sharing or exchange takes place and you might agree with the situation.

33. Do you agree with the existing arrangement on the sharing or exchange of personnel for work experience? 37

1	2	3	4	5
no agreement	little agreement	fair agreement	good agreement	very good agreement

34. Do you agree with the existing arrangement on the sharing or exchange of equipment for work experience? 38

1	2	3	4	5
no agreement	little agreement	fair agreement	good agreement	very good agreement

35. Do you agree with the existing arrangement on the sharing or exchange of information on student progress/behavior on work experience?

1	2	3	4	5	39
no agreement	little agreement	fair agreement	good agreement	very good agreement	

36. Do you agree with the existing arrangement on the sharing or exchange of ideas for final student evaluation?

1	2	3	4	5	40
no agreement	little agreement	fair agreement	good agreement	very good agreement	

Should you have any comments to make about school-sponsor relationships that you feel have been ignored or overlooked please use this space to do so.

APPENDIX B

OPINIONNAIRE ON STUDENT LEARNING ACTIVITIES

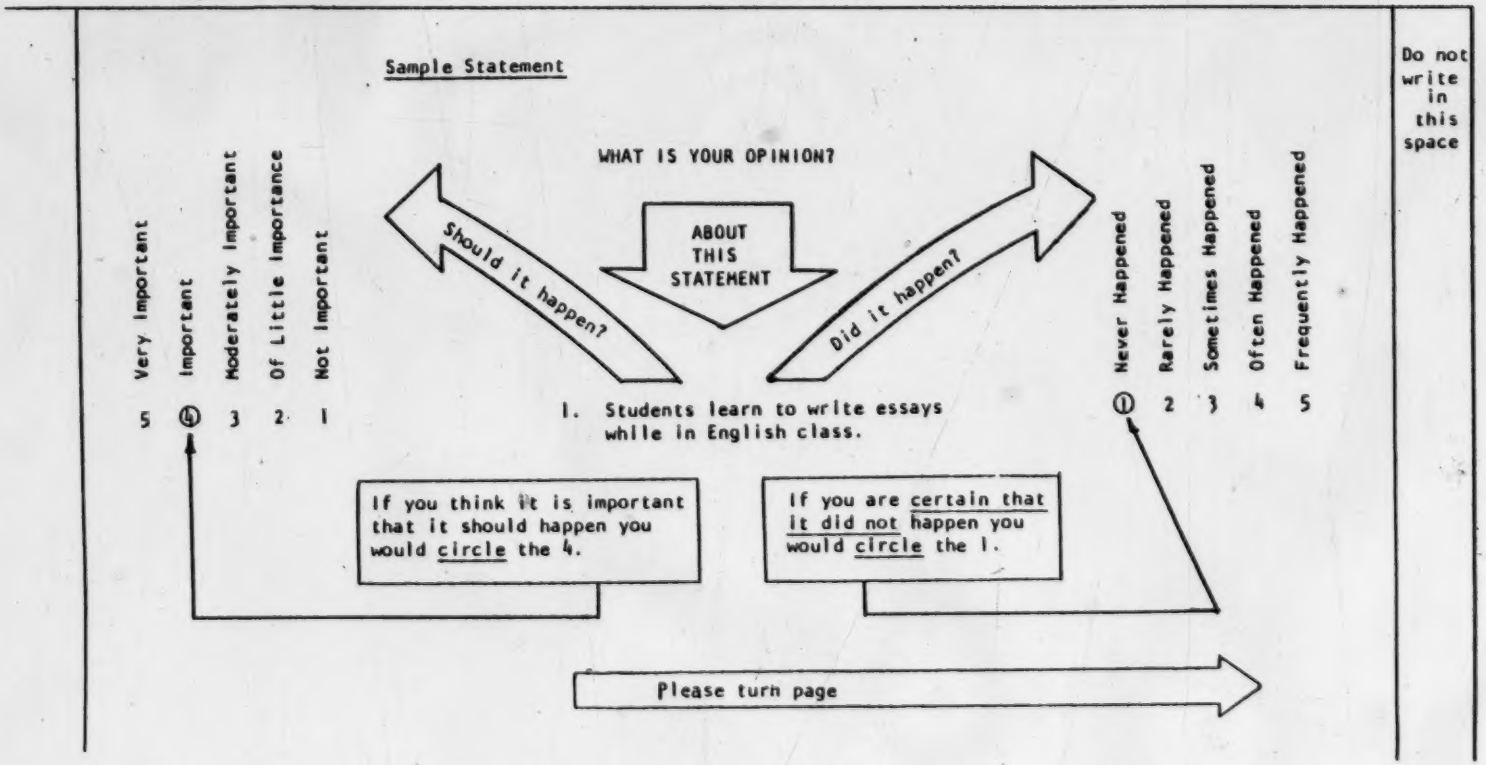
THE WORK EXPERIENCE OPINIONNAIRE ON STUDENT LEARNING ACTIVITIES

This questionnaire seeks your opinion on some learning activities provided students on work experience.

You are asked to make <u>two</u> decisions on each item:

1. How important is it to you that it <u>should</u> happen?
2. How frequently do you think it happened?

In each case you will circle the number which most closely corresponds to your opinion.


Sample Statement
WHAT IS YOUR OPINION?
ABOUT THIS STATEMENT
Should it happen?
Did it happen?
Very Important
Important
Moderately Important
Of Little Importance
Not Important
5 4 3 2 1
Never Happened
Rarely Happened
Sometimes Happened
Often Happened
Frequently Happened
1 2 3 4 5
1. Students learn to write essays while in English class.
If you think it is important that it should happen you would circle the 4.
If you are certain that it did not happen you would circle the 1.
Please turn page
Do not write in this space

WHAT IS YOUR OPINION?

ABOUT THIS STATEMENT

Should it happen?

Did it happen?

Very Important	Important	Moderately Important	Of Little Importance	Not Important		Never Happened	Rarely Happened	Sometimes Happened	Often Happened	Frequently Happened	1-4
5	4	3	2	1	1. Students learn useful skills on real jobs under actual working conditions while on work experience.	1	2	3	4	5	5, 6
5	4	3	2	1	2. Students learn to develop the necessary attitudes for successful job performance while on work experience.	1	2	3	4	5	7, 8
5	4	3	2	1	3. Students learn to develop good work habits while on work experience.	1	2	3	4	5	9, 10
5	4	3	2	1	4. Students learn to develop personality and poise while on work experience.	1	2	3	4	5	11, 12
5	4	3	2	1	5. Students learn to assume responsibilities while on work experience.	1	2	3	4	5	13, 14
5	4	3	2	1	6. Students learn to develop an appreciation of the dignity of honest work while on work experience.	1	2	3	4	5	15, 16
5	4	3	2	1	7. Students learn to get along with fellow workers and employers while on work experience.	1	2	3	4	5	17, 18
5	4	3	2	1	8. Students learn the relationship between production and wages while on work experience.	1	2	3	4	5	19, 20
5	4	3	2	1	9. Students learn the relationship between education and job success while on work experience.	1	2	3	4	5	21, 22

PLEASE TURN TO THE NEXT PAGE

WHAT IS YOUR OPINION?

ABOUT THIS STATEMENT

Should it happen?

Did it happen?

Very Important	Important	Moderately Importa	Of Little Importance	Not Important		Never Happened	Rarely Happened	Sometimes Happened	Often Happened	Frequently Happened	
5	4	3	2	1	10. Students learn about business and industry while on work experience.	1	2	3	4	5	23, 24
5	4	3	2	1	11. Students learn about worthwhile careers and jobs while on work experience.	1	2	3	4	5	25, 26
5	4	3	2	1	12. Students learn to make the adjustment between school and the world of work while on work experience.	1	2	3	4	5	27, 28
5	4	3	2	1	13. Students learn the value of employer references while on work experience.	1	2	3	4	5	29, 30
5	4	3	2	1	14. Students learn skills and knowledge not found in school while on work experience.	1	2	3	4	5	31, 32
5	4	3	2	1	15. Students learn from training and experience on equipment not found in the school while on work experience.	1	2	3	4	5	33, 34
5	4	3	2	1	16. Students learn a relationship between academic education and job and career requirements while on work experience.	1	2	3	4	5	35, 36
5	4	3	2	1	17. Students learn the value of staying in school for a longer period of time while on work experience.	1	2	3	4	5	37, 38
5	4	3	2	1	18. Students learn the skills and knowledge needed for employment in their own communities while on work experience.	1	2	3	4	5	39, 40

WOULD YOU PLEASE CHECK THIS OPINIONNAIRE TO ENSURE THAT YOU HAVE RESPONDED TO EACH ITEM.

THEN PLEASE TURN TO THE NEXT PAGE

FINE PRINT

We realize that many other kinds of exchanges take place on work experience, and that we may not have included them in our list. Would you please take a few minutes of your time to list some additional important factors that you think are associated with the work experience program?

Positive Factors Associated with the Program	Negative Factors Associated with the Program

PLEASE PLACE THIS QUESTIONNAIRE IN THE STAMPED, SELF-ADDRESSED ENVELOPE AND POST IT IMMEDIATELY.

THANK YOU VERY MUCH FOR YOUR COOPERATION!

FINE PRINT

APPENDIX C

TELEPHONE INTERVIEW SCHEDULE

TELEPHONE INTERVIEW SCHEDULE

Hello:

1. My name is Dick Germsheid. I am currently completing a Ph. D. program in Ed. Admin.

2. I am doing an evaluation of the work experience program in the province and I would appreciate your assistance in completing this project.

3. Specifically, we would like to know how work experience programs in the province are organized between the school and the work site. Second, we would like to know what work experience coordinators, students and job supervisors believe to be important for students to learn on work experience. And third, we would like to know if these people think students actually did learn those things on work experience.

4. Would you be willing to support such a study?

5. Thank you. Would you give me the name of the school coordinator at school?

   May I contact him/her? Thank you.

Telephone school coordinator, repeat paragraph 1-4.

How may students are on your list at present? (Calculate sample size).

We will need ____ students ____ supervisors and yourself to answer the questionnaires. The package will reach you on _____ (give date).

Will you distribute the questionnaires?

Thank you. You have been very cooperative.

You will be hearing from me: Good-by.

APPENDIX D

LETTERS OF INSTRUCTION

FACULTY OF EDUCATION
THE UNIVERSITY OF ALBERTA

Dear Student:

After 15 years in industry and 10 years of vocational teaching I am completing a doctoral program at the university.

Would you please assist me in improving the work experience program by supplying the following information?

First, it is necessary to know what you believe to be important for work experience STUDENTS to learn. Second, whether or not you think those things were actually learned on work experience. Last, it is necessary to know how the work experience program is organized between the school and the work site.

The information provided by you will be used to help improve future work experience programs. Therefore, it is vital that you complete all items on the questionnaire and return it to me as soon as possible. (Any questionnaire returned after January 31, 1980 cannot be used.)

This information will be held in the strictest confidence.

Thank you for your time and cooperation.

Sincerely yours,

Dick Germsheid

R. D. Germsheid

RDG:jg

645 EDUCATION SOUTH, EDMONTON, ALBERTA, CANADA • T6G 2G5 • TELEPHONE (403) 432-3678

FACULTY OF EDUCATION
THE UNIVERSITY OF ALBERTA

Dear Friend of Work Experience:

After 15 years in industry and 10 years of vocational teaching I am completing a doctoral program at the university.

Would you please assist me in improving the work experience program by supplying the following information.

First, it is necessary to know what you believe to be important for work experience STUDENTS to learn. Second, whether or not you think those things were actually learned on work experience. Last, it is necessary to know how the work experience program is organized between the school and the work site.

The information supplied by you will be used to help improve work experience programs; therefore, it is vital that you complete all items on the questionnaire. Should you not have information relating to certain questions would you please pass the questionnaire to someone who can do so?

Would you please return the questionnaire to me as soon as possible? (Any questionnaire returned after January 31, 1980 cannot be used).

This information will be held in the strictest confidence.

Thank you for your time and effort.

Sincerely yours,

Dick Germsheid

R. D. Germsheid

RDG:jg

645 EDUCATION SOUTH, EDMONTON, ALBERTA, CANADA • T6G 2G5 • TELEPHONE (403) 432-3678

DOCUMENT SLANTED
Document incliné

FACULTY OF EDUCATION
THE UNIVERSITY OF ALBERTA

Dear Colleague:

Do you recall our telephone conversation during the week of November 19, 1979? We discussed an evaluation of work experience in Alberta.

This package contains copies of questionnaires for yourself, students and their job supervisors.

Using your work experience class list as a reference would you please issue the enclosed questionnaires as follows?

Choose student#

Further, would you please distribute the job supervisor questionnaires to the person on the work site who directly (or most directly) supervised those students while on work experience?

Should you encounter any problems with this project please telephone me at 469-9764 or 432-3678 (leave a message). Both are Edmonton numbers.

Thank you for your time and your cooperation.

Yours truly,

R. D. Germsheid

645 EDUCATION SOUTH, EDMONTON, ALBERTA, CANADA • T6G 2G5 • TELEPHONE (403) 432-3678

FACULTY OF EDUCATION
THE UNIVERSITY OF ALBERTA

Dear Colleague:

After 15 years in industry and 10 years of vocational teaching I am completing a doctoral program at the university.

Would you please assist me in improving the work experience program by supplying the following information?

First, it is necessary to know what you believe to be important for work experience STUDENTS to learn. Second, whether or not you think those things were actually learned on work experience. Last, it is necessary to know how the work experience program is organized between the school and the work site.

The information supplied by you will be used to help improve future work experience programs. Therefore, it is vital that you complete all items on the questionnaire. Should you not have the information relating to certain questions would you please pass the questionnaire to someone who can do so?

Would you please return the questionnaire to me as soon as possible? (Any questionnaire returned after January 31, 1980 cannot be used.)

This information will be held in the strictest confidence.

Thank you for your time and effort.

Sincerely yours,

Dick Germsheid

R. D. Germsheid

RDG:jg

645 EDUCATION SOUTH, EDMONTON, ALBERTA, CANADA • T6G 2G5 • TELEPHONE (403) 432-3678

APPENDIX E

TELEPHONE REMINDER

TELEPHONE REMINDER

Hello:

You will recall the Work Experience Evaluation package sent to you in early January?

A. I guess we have both been busy in the last few weeks. I have been processing the information supplied by other people on the Work Experience evaluation and I noticed a number of work supervisor/student questionnaires were missing.

B. Would you please take a few minutesof your time to encourage your Work Experience job supervisors to complete and return their questionnaires? Their opinions are vital to the project.

For students repeat Paragraph A.

C. Would you please take a few minutes of your time to encourage your Work Experience students to complete and return their questionnaires? Their opinions are vital to the project.

Thank you very much. I shall look forward to the return of your packages.

APPENDIX F

GENERAL INFORMATION ON RESPONDENT AND PROGRAM CHARACTERISTICS

STUDENT QUESTIONNAIRE

GENERAL INFORMATION

1-4

Please answer the following questions by placing a check mark ✓ in the brackets. Check only the one best response per question.

1. What is your age?

   1 ( ) 15 years of age or younger
   2 ( ) 16 years of age
   3 ( ) 17 years of age
   4 ( ) 18 years of age
   5 ( ) more than 18 years of age

5

2. What is your sex?

   1 ( ) Female
   2 ( ) Male

6

3. What is your present status in school?

   1 ( ) grade 10 student
   2 ( ) grade 11 student
   3 ( ) grade 12 student

7

4. In what type of program are you presently enrolled?

   1 ( ) Matriculation
   2 ( ) General diploma
   3 ( ) Vocational
   4 ( ) Trades and Services
   5 ( ) Other

8

5. In what type of work experience course are you presently enrolled?

   1 ( ) Work Experience 25 only
   2 ( ) Work Experience 35 only
   3 ( ) Work Experience 25/35

9

6. Which of the following categories most closely describes the type of work that you observed on work experience? (Choose one only).

   1 ( ) Jobs performed were varied, non-routine and unpredictable; a variety of skills were needed; no two jobs were alike; "custom" work.

   2 ( ) Jobs performed seldom varied; jobs were routine and predictable; limited skills were required; one job was much like another. 10

   3 ( ) Jobs performed never varied; jobs were routine and pretictable; machines did all of the work; no special skills were required.

7. Specifically, what kind of job or occupation did you investigate on work experience? (eg. typist, mechanic, engineer, nurse) 11

   _____

Terms used in the questionnaire

To avoid confusion in terms used in the questionnaire some clarification is needed.

Coordinator: Usually the work experience coordinator in the school. Teaches Work Experience 25 and/or 35 and supervises students on the job site.

Job Supervisor: Usually the person on the job site who supervises the student worker.

Sponsor: The business/industrial organization that accepts the student for temporary employment on a work site.

School: The educational organization that offers Work Experience 25 and/or 35 at the grade 10, 11, and 12 level.

Instructions:

This part of the questionnaire is designed to evaluate the way in which your work experience program is organized between the school and the job site. Based on your perception of the work experience program please respond to each statement as accurately as possible.

Circle the number that corresponds most closely to your perception of the situation.

For Example:

How often does it snow during the winter in Alberta?

1	2	3	(4)	5
Never	rarely	sometimes	often	frequently

If your perception of Alberta winters leads you to think it snows often you would circle the (4)

1. How completely are your responsibilities on work experience specified? 5

1	2	3	4	5
vague unavailable or nonexistant	generally understood	poorly written	clearly written	very clearly written

2. How completely are your methods for reporting on the work experience program specified? 6

1	2	3	4	5
vague unavailable or nonexistant	generally understood	poorly written	clearly written	very clearly written

3. Does the work experience coordinator visit you at the work site? 7

1	2	3	4	5
Never	Rarely	Sometimes	Often	Frequently

4. Does the job supervisor help you with the jobs he/she has assigned you to do? 8

1	2	3	4	5
Never	Rarely	Sometimes	Often	Frequently

5. Do the skills and knowledge taught you at the school help to understand the skills and knowledge needed on the job site? 9

1	2	3	4	5
No Help	A little help	Fair help	much help	very much

6. Do the skills and knowledge taught you at the job site help to understand the skills and knowledge needed in school? 10

1	2	3	4	5
No Help	A little help	Fair Help	much help	very much

PLEASE PROCEED TO THE NEXT SECTION

COORDINATOR QUESTIONNAIRE

1, 4

GENERAL INFORMATION

Please answer the following questions by placing a check mark ✓ in the bracket. Check only the one best response per question.

1. What is your age?

   1 ( ) 20 to 30
   2 ( ) 31 to 40
   3 ( ) 41 to 50
   4 ( ) 51 to 60
   5 ( ) over 60

5

2. What is your sex?

   1 ( ) Female
   2 ( ) Male

6

3. What is the highest level of education that you completed?

   1 ( ) Some university
   2 ( ) Bachelor degree
   3 ( ) Some graduate work
   4 ( ) Graduate dimploma
   5 ( ) Graduate degree

7

4. What is your main function in school? (More than 50% of time devoted)

   1 ( ) Principal
   2 ( ) Vice-Principal
   3 ( ) Department Head
   4 ( ) Counsellor
   5 ( ) Teacher
   6 ( ) Other

8

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5. Which of the following categories most closely describes the type of activity to which most of your students are exposed on work experience? (Choose one only)

   1 ( ) Jobs performed are varied; non-routine and unpredictable; a variety of skills are needed; no two jobs are alike; "custom" work.

   2 ( ) Jobs performed seldom vary; jobs are routine and predictable; limited skills are required; one job is much like another.

   3 ( ) Jobs performed never vary; jobs are routine and predictable; machines do all of the work; no special skills are required.

9

6. In which of the following general education programs in your school does your main teaching responsibility lie?

   1 ( ) Matriculation

   2 ( ) General dimploma

   3 ( ) Vocational

   4 ( ) Trades and Services

   5 ( ) Other

10

Please answer the following questions by placing a number in the blank.

7. How long have you been employed in the teaching profession? (include present year)

   _____ years in the teaching profession

11, 12

8. How long have you been employed outside the teaching profession?

   _____ years outside the teaching profession

13, 14

9. How many years has your school offered a work experience program? (include present year)

   _____ years offered

15

211

10. How many years have you been involved directly in the work experience program? (include present year)

16

_____ years of direct involvement

11. How many students are currently enrolled in work experience in all grades in your school?

17, 18, 19

_____ students in all grades

12. How many work stations are currently available to the school for work experience?

20, 21, 22

_____ stations currently available

13. How many work stations are currently being used by the school for work experience?

23, 24, 25

_____ stations being used

14. What is your best estimate of the number of job offers made to students this year as a result of work experience?

26, 27, 28

_____% of work experience students offered jobs

JOB SUPERVISOR QUESTIONNAIRE

Please answer the following questions by placing a number in the blank.

5. How many people are employed by your firm?

_____ people employed

9, 10, 11

6. How many years has your firm been associated with the work experience program? (include present year)

_____ years with the program

12

7. How many years have you been involved with the work experience program? (include present year)

_____ years of involvement

13

8. How many work experience students are currently being sponsored by your firm?

_____ students being sponsored

14, 15

9. What is the average number of students that your firm has sponsored per year?

_____ students per year

16, 17

10. Of the total number of work experience students sponsored by your firm this year what percentage would you recommend for employment by your firm?

_____% would be recommended for employment

18, 19, 20

11. Of the total number of work experience students sponsored by your firm this year what percentage have been offered employment by your firm?

_____% have been offered employment

21, 22

12. How many years have you been working full-time since leaving school?

_____ years working

23, 24

GENERAL INFORMATION

1-4

Please answer the following questions by placing a check mark ✓ in the brackets. Check only the one best response per question.

1. What is your age?

   1 ( ) 20 or below
   2 ( ) 21 to 30
   3 ( ) 31 to 40
   4 ( ) 41 to 50
   5 ( ) 51 to 60
   6 ( ) over 60

5

2. What is your sex?

   1 ( ) Female
   2 ( ) Male

6

3. What is the highest level of education that you completed?

   1 ( ) Elementary school
   2 ( ) Junior high school
   3 ( ) Senior high school
   4 ( ) College diploma (2 yr. program)
   5 ( ) University degree (4 yr. program)
   6 ( ) Graduate degree

7

4. Which of the following categories most closely describes the type of activity in which your firm is engaged? (Choose one only).

   1 ( ) Jobs performed are varied, non-routine and unpredictable; a variety of skills are needed; no two jobs are alike; "custom" work.
   2 ( ) Jobs performed seldom vary; jobs are routine and predictable; limited skills are required; on job is much like another.
   3 ( ) Jobs performed never vary; jobs are routine and predictable machines do all the work; no special skills are required.

8